



**mineral resources**

Department:  
Mineral Resources  
REPUBLIC OF SOUTH AFRICA

NAME OF APPLICANT: **Kangra Coal (Pty) Ltd.**

REFERENCE NUMBER: MP30/5/1/2/2/10046MR

## **SCOPING REPORT**

**SUBMITTED WITH DUE REGARD TO  
CONSULTATION WITH COMMUNITIES AND  
INTERESTED AND AFFECTED PARTIES**

**AS REQUIRED IN TERMS OF REGULATION 49 OF THE MINERAL AND  
PETROLEUM RESOURCES DEVELOPMENT ACT (ACT 28 of 2002), AND  
IN ACCORDANCE WITH THE STANDARD DIRECTIVE FOR THE  
COMPILATION THEREOF AS PUBLISHED ON THE OFFICIAL WEBSITE  
OF THE DEPARTMENT OF MINERAL RESOURCES.**

## **A. Definitions**

**'consultation'** means a two way communication process between the applicant and the community or interested and affected party wherein the former is seeking, listening to, and considering the latter's response, which allows openness in the decision making process.

**'community'** means a group of historically disadvantaged persons with interest or rights in a particular area of land on which the members have or exercise communal rights in terms of an agreement, custom or law: Provided that, where as a consequence of the provisions of the Act negotiations or consultations with the community are required, the community shall include the members or part of the community, directly affected by prospecting or mining, on land occupied by such members or part of the community.

**'Interested and affected' parties** include, but are not limited to; –

- (i) Host Communities
- (ii) Landowners (Traditional and Title Deed owners)
- (iii) Traditional Authority
- (iv) Land Claimants
- (v) Lawful land occupier
- (vi) The Department of Land Affairs,
- (vii) Any other person ( including on adjacent and non-adjacent properties) whose socio-economic conditions may be directly affected by the proposed prospecting or mining operation
- (viii) The Local Municipality,
- (ix) The relevant Government Departments, agencies and institutions responsible for the various aspects of the environment and for infrastructure which may be affected by the proposed project.

## **STANDARD DIRECTIVE**

**All applicants for, mining rights, in terms of the provisions of Section 29 (a) and in terms of Regulation 49 (4) of the Mineral and Petroleum Resources Development Act, directed to submit report strictly in accordance with the following format and subject headings, and as informed by the guideline posted on the Departments Official Website, within 30 days of notification by the Regional Manager of the acceptance of such application.**

1. The methodology applied to conduct scoping,

- 1.1. Name the communities as defined in the guideline, or explain why no such community was identified.

**The communities identified within the Project footprint and which are defined in the guideline are as follows:**

- 1. Yende Community;**
- 2. Kanluka Community; and**
- 3. Thuthukani Community.**

**The Thuthukani community occupies land within the Mkhondo Municipality and the Kanluka community land is located within the Pixley Kalsaka Seme Municipality. The Yende community occupies land that lies within both local municipalities.**

**These local municipalities lie within the Gert Sibande District Municipality.**

- 1.2. State whether or not the Community is also the landowner.

**Yes. The land occupied by the aforementioned communities is considered as traditional landowners (Annex A provides a list of affected traditional and private land owners).**

- 1.3. State whether or not the Department of Land Affairs been identified as an interested and affected party

**Yes, this department has been included as an Interested and Affected Party (I&AP) at a national (Department of Rural Development and Land Reform) and provincial level (Mpumalanga Department of Agriculture, Rural Development**

**and Land Administration) - refer to Interested and Affected Parties listed in Annex D.**

- 1.4. State specifically whether or not a land claim is involved

**According to the Rural Development and Land Reform Department there is currently registered land claims on the following farms:**

**Donkerhoek 14 HT; and  
Twyfelhoek 379 IT**

- 1.5. Name the Traditional Authority identified by the applicant.

**Chief Moloji represents the traditional authority for the Gert Sibande District Municipality (Lekgoetla Traditional Council). On a local level, Peter Moloji represents the Tribal Authority council for the Dr. Pixley Kalsaka Seme Local Municipality and Chief Mthetwa represents the Madabukela Traditional Council for the Mkhondo Local Municipality.**

- 1.6. List the landowners identified by the applicant. (Traditional and Title Deed owners)

**Traditional land within the proposed Project area consist of the land occupied by the Yende, Kanluka and Thuthukani communities. These portions of land are traditionally owned by these communities.**

**Additionally, C.J.F Greyling and Kangra Coal are the only identified private landowners.**

**Refer to Annex A which provides a list of traditional and private land owners.**

- 1.7. List the lawful occupiers of the land concerned

**Annex A contains the properties in which the expansion will take place as well as the lawful occupiers of the land concerned.**

- 1.8. Explain whether or not other persons' (including on adjacent and non-adjacent properties) socio-economic conditions will be directly affected by the proposed prospecting or mining operation and if not, explain why not.

**A motivation for the proposed expansion Project is that Kangra Coal constitutes one of the main sources of employment in the Dr. Pixley Kalsaka Seme and Mkhondo Local Municipalities. In an attempt to increase the skills and capabilities of current and potential employees, Kangra Coal maintains ongoing education and training programmes and economic contributions to development projects in surrounding communities.**

**The proposed Project is likely to impact upon landowners/residents located in the Study Area as well as the socio-economic conditions of the district and local municipalities.**

**Individuals that will be affected are most likely to be those that belong to informal households and commercial landowners in the area. Although not within the scope of this EIA, people living directly within the Project Area may require compensation due to relocation from the Main Mine Adit footprint.**

**The Project has the potential to result in both negative and positive social impacts. Working within the current framework of Kanga Coal's social and labour plan, this Project will need to aim at enhancing the positive impacts resulting from this Project and minimizing any negative social impacts which may arise as a result of the Project.**

**In order to satisfy the full scope of work envisaged for the social baseline study (i.e. primary data collection) and to provide a firm foundation for the Social Impact Assessment, further social specialist input in the form of a Social Impact Assessment (SIA) will be required during the EIA phase of the study.**

1.9. Name the Local Municipality identified by the applicant.

**The Project area lies within the Mkhondo and Dr. Pixley Kalsaka Seme Local Municipalities (refer to Figure 1 in Annex B). These local Municipalities are further divided into Wards. Of relevance to this Project is Ward 2 and 3 of the Mkhondo Local Municipality and Wards 5 and 10 of the Dr. Pixley Kalsaka Seme Local Municipality. The Mkhondo and Dr. Pixley Kalsaka Seme Local Municipalities both fall under the Gert Sibande District Municipality.**

1.10. Name the relevant Government Departments, agencies and institutions responsible for the various aspects of the environment , land and infrastructure which may be affected by the proposed project.

**The following authorities are responsible for the following licensing/application processes:**

- 1. Environmental Authorisation - Mpumalanga Department of Economic Development, Tourism and Environment (DEDET).**
- 2. Water Use License - National Department of Water Affairs (DWA).**
- 3. Mining Rights Application - Mpumalanga Department of Minerals and Resources (DMR).**
- 4. Waste Management License - National Department of Environmental Affairs (DEA).**

**Commenting authorities from selected National, Provincial and Local Departments as well as relevant Ward Councillors and elected political representatives are listed below:**

**NATIONAL DEPARTMENTS**

**Department of Mineral Resources;**  
**South African Heritage Resources Agency (SAHRA);**  
**Department of Water Affairs (DWA);**  
**Department of Rural Development and Land Reform (DRDLR);**  
**Department of Environmental Affairs;**  
**Department of Health ;**  
**Department of Public Works;**  
**Department of Education ;**  
**Department of Agriculture, Forestry & Fisheries; and**  
**Department of Energy.**

**PROVINCIAL DEPARTMENTS:**

**Mpumalanga Tourism and Parks Agency;**  
**Mpumalanga Department of Economic, Development;**  
**Tourism and Environment;**  
**Mpumalanga Department of Labour;**  
**Department of Water Affairs (DWA) Mpumalanga;**  
**Mpumalanga Dept. Public Works, Roads and Transport; and**  
**Mpumalanga Dept. Agriculture, Rural Development and Land Administration.**

**GERT SIBANDE DISTRICT DEPARTMENTS:**

**Dept. Human Settlements;**  
**Dept. Public Works Roads and Transport; and**  
**Dept. Agriculture.**

**LOCAL DEPARTMENTS**

**At a local level, the ward councillors are listed as I&APs as well as representatives of the people at the lowest level. In addition, the following departments are involved at the local level:**

**Mkhondo Environmental Protection Agency;**  
**Urban & Economic Development (Pixley);**  
**Local Economic Development (Pixley); and**

**Dept of Co-operative Governance and Traditional Affairs  
(Pixley).**

**Annex D contains a full list of all stakeholders including government departments and institutions.**

- 1.11. Confirm that evidence that the landowner or lawful occupier of the land in question, and any other interested and affected parties including all those listed above, were notified, has been appended hereto.

**ERM is conducting the Public Participation Process (PPP) as part of the Environmental Impact Assessment (EIA) for Environmental Authorisation, Waste License Application, Water Use License Application (WULA) and the Mining Rights Application Processes for the proposed expansion of Kangra Coals Kusipongo Resource mine in Mpumalanga. The PPP will be conducted by ERM's specialist PPP team and will be done in conjunction with the technical environmental studies. This team includes consultants from ERM as well as a facilitator and translator from Di-Idea Communications (hereafter included in references to the ERM team).**

**The PPP has been designed to comply with the regulatory requirements set out in the National Environmental Management Act (NEMA) (Act 107 of 1989) as amended, the Mineral and Petroleum Resources Development Act (Act 28 of 2002) and the National Water Act (Act 36 of 1998). Public participation in an EIA is not only a statutory requirement, but a process that is designed to provide Interested and Affected Parties (I&APs) with an opportunity to evaluate all aspects of the proposed Project, with the objective of improving the proposed Project by maximizing its benefits while minimising its adverse effects. I&APs represent relevant interests and sectors of society and the various relevant organs of state who work together to inform better decision making than if they had acted independently, and better implementation of decisions through I&APs participating in the process.**



**To date public participation activities associated the pre-scoping phase have been undertaken. This involved the following activities:**

- 1. Distribution of proposed Project announcement letter and Background Information Document (BID) (refer to Annex C). The BID and announcement documentation emailed and posted to stakeholders.**
- 2. Placing of adverts. Adverts were placed in the Excelsior (5 August 2011) and Recorder (5 August 2011) newspapers as well as the municipal circulars (Vuka Pixley Kalsaka Seme and Mkhondo News) (refer to Annex C).**
- 3. Putting up of site notices. Site notices were put up at local libraries, post offices, municipal offices and frequently visited shops or taxi ranks in Volksrust, Wakkerstroom, Dirkiesdorp, Piet Retief, Driefontein and Daggakraal (refer to Annex C).**
- 4. Identification of stakeholders. Stakeholder database which includes interested and affected parties from various sectors of society including directly affected landowners in and around the proposed Project area (refer to Annex D).**
- 5. Meetings with relevant stakeholders. Meetings with local authorities, appropriate traditional authorities and potentially directly affected landowners in mid July 2011. Introduction of the proposed Project and its processes (refer to Annex E).**
- 6. Obtained comments from stakeholders. Comments, issues of concern and suggestions received from stakeholders are captured in the Comment and Response Report. These interim comments and responses are appended to Annex F.**

**A Draft Scoping Report developed under the requirements of the NEMA (together with this report) will be made available to registered I&APs for a 60 day comment period quarter one of 2013 and placed at the following public places within the proposed Project area:**

- **Volksrust Public Library and Post Office**
- **Wakkerstroom Library and Post Office**
- **Piet Retief Library and Post Office**
- **Driefontein Post Office & Thusong Service Centre**
- **Daggakraal Clinic**
- **Dirkiesdorp Clinic**

**Announcement of the reports and the associated public comment period will be done by means of email, post, fax and hand delivery of letters where required. This serves as a first round of engagement and sharing of information related to the (reports). It is also anticipated that key I&APs will be contacted directly to ensure that they are aware of the announcement relating to the availability of the reports and the public comment period.**

**During the 60 day comment period a public meeting, open house and focus group meetings will be held with various stakeholders. All comments, issues of concern and suggestions received from stakeholders during these engagement activities will be captured in an updated comment and response report, which will be included in the Environmental Impact Assessment Report, which will be lodged with the Department of Minerals and Resources before 27 May 2013.**

**Public participation during the impact assessment phase of the EIA will revolve around a review of the findings of the EIA, presented in a Draft EIA Report and associated Environmental Management Programme (EMP) developed under the NEMA. These will be made available for public comment during the second quarter of 2013.**

**I&APs will be advised timeously of the availability of these reports, of how to obtain them, and of the date and venue of the meetings where the content of the reports will be presented for comment. They will be encouraged to comment either in writing (mail or email), by attending the stakeholder meetings or by telephone. Ample notification of due dates will be provided.**

**As with the scoping phase developed under the requirements of the NEMA, similar activities will be undertaken to ensure that stakeholders are given the opportunity to comment on the EIA Report and associated EMP. It is anticipated that this phase of activity will commence in the second quarter of 2013.**

2. A description of the existing status of the cultural, socio-economic and biophysical environment, as the case may be, prior to the proposed mining operation; which description must include:-

**See Sections 2.1 to 2.7 below.**

- 2.1. Confirm that the identified and consulted interested and affected parties agree on the description of the existing status of the environment.

**I&APs have been consulted and provided with interim information on the proposed Project. Through discussions and comments received relating to the existing status of the environment, it is evident that parties are concerned about the ecological and hydrological sensitivities of the receiving environment (refer to Annex F for the Comment and Response Report and Annex E for Stakeholder Meeting Minutes).**

- 2.2. Describe the existing status of the cultural environment that may be affected

**Contextual evidence and fieldwork indicates that the following types and ranges of cultural heritage resources occur in the larger Project Area, namely:**

- **Graveyards dating from the historical period (older than sixty years) or from the recent past (Annex B - Figures 2 to 9);**
- **Homesteads dating from the historical period (older than sixty years) or from the recent past (Annex B - Figures 2 to 9); and**
- **Colonial farmstead complexes consisting of farmhouse, cattle enclosures and graveyards which date from the second half of the nineteenth century and from the early twentieth century. When such structures and features are spatially associated with each other in time and space they may constitute small cultural landscapes.**

**The baseline cultural heritage survey for the Study Area revealed the following types and ranges of heritage resources (as outlined in Section 3 of the National Heritage Resources Act (No 25 of 1999)), namely:**

- **A single grave in proximity to proposed Adit A (Annex B - Figures 2 to 9);**
- **A cluster of approximately 20 graves within a distance of approximately 35m from the south eastern border of the Main Mine Adit (Annex B - Figures 2 to 9);**
- **A small cultural landscape incorporating a cattle enclosure, graveyard and the remains of a possible dwelling on the outskirts of the formerly proposed Adit C. The remains of a third structure, which may be those of a dwelling, are located further from these two structures and from the former Adit C area (Annex B - Figures 2 to 9);**
- **Stone walls dating from the Late Iron Age near the conveyer route (Annex B - Figures 2 to 9) running between Adit B and the existing Kangra Coal Plant;**
- **A sandstone bank or reef is located near the Adit B area. No Stone tools or rock paintings were observed at this natural feature (Annex B - Figures 2 to 9); and**
- **Stone walls (Site LIA01) dating from the Late Iron Age are located near the proposed Project Area (Annex B - Figures 2 to 9). These stone walls date from the Late Iron Age (AD1600 to**

**AD1880) and were possibly used as cattle enclosures or as outer walls which demarcated dwellings. Site LIA01 was probably occupied by a Sotho or Nguni speaking community during the eighteenth century.**

**In summary, the above mentioned cultural heritage remains have the following coordinates:**

- **A single grave near Adit A - 27° 01.072'S; 30° 17.405'E**
- **Graveyard 35m from the south eastern border of Main Mine Adit A - 27° 01' 01.96"S; 30° 17' 15.25" E**
- **A single square cattle enclosure near Adit B - 27° 03.353'S; 30° 14.852'E**
- **LIA01 site with stone wall enclosures - 27°02.842'S; 30° 22.634'E**
- **Historical graveyard near Adit B - 27° 03.307'S; 30° 14.764'E**
- **Possible Stone Age site - 27° 03.665'S; 30° 19.055'E**

2.3. Describe the existing status of any heritage environment that may be affected

**Refer to Section 2.2 above.**

2.4. Describe the existing status of any current land uses and the socio-economic environment that may be directly affected

**There is a large labour pool in the four Wards affected by the proposed Project. Across the four Wards, 51% of the population (or 20,958 people) fall within the 'working age' of between 15 to 64 years. There is a greater number of work seekers in all four Wards as compared to those employed in each Ward.**

**The labour force is, however largely uneducated. The largest percentage of all Wards population is without schooling (52%). Only 8% of the population across all Wards have a Grade 10 or Grade 12 certificate.**

**Income levels for households within all Wards are generally low. Approximately 15% of households earn between R1 to R4,**

**800 per month. Approximately 47% of households in Ward 3 of Mkhondo have no income in comparison to 41% in Ward 2 and 32% in Ward 5 and 31% in Ward 10.**

**Access to services in all Wards is generally poor. For example, 23% of households in Ward 10 have no access to piped water and 31% of households in Ward 10 have no access to sanitation.**

**Public transport systems within these Wards are poor; 41% of residents across all three Wards walk to their destinations, as opposed to the utilisation of any form of transport.**

2.5. Describe the existing status of any infrastructure that may be affected.

**The majority of the surface infrastructure associated with the proposed Project, such as a coal beneficiation plant and material handling facilities, is located on the existing Maquasa East, Maquasa West and Maquasa West Extension properties. This infrastructure will continue to be used for the processing of coal reserves from the proposed Kusipongo Resource.**

**Coal will be transported from the proposed Main Mine Adit (Adit A) in the Kusipongo Resource to the existing Maquasa West Adit via the proposed new overland conveyor system. From there it is proposed that the overland conveyor system feeds into the existing overland conveyor system, which will then transport coal to the existing Maquasa East Coal beneficiation plant.**

**In terms of district/national road usage, Kangra Coal is presently contributing 8% to the traffic flow on the N2 (between D2548 and Piet Retief), 78% of the D2548 traffic (between the D1091 and the Haul Road turn off) and 66% of D1091 (from the access road to the mine northwards to Driefontein). Heavy vehicles and buses associated with the mine constitute about 630 vehicles out of a total of 783 vehicles (or 80%). Traffic is expected to increase slightly during the construction phase of the proposed Project; however, operational phase traffic associated with the new mine is not expected to significantly increase current traffic flows, as mining output will remain the same.**

2.6. Describe the existing status of the biophysical environment that will be affected, including the main aspects such as water resources, flora, fauna, air, soil, topography etc.

### **PHYSICAL ASPECTS**

- **Climate -**

**Wind - The predominant wind direction is from the northeast with a frequency of occurrence of 16%. Winds from the north are also predominant, occurring for 10% of the total period. During the day-time, strong winds from the north and north-easterly sectors predominate; during the night, north easterly winds are most common.**

**Precipitation - Piet Retief is located in the summer rainfall region of South Africa, in which more than 80% of the annual rainfall occurs between the period October to March. Total maximum rainfall is recorded during the month of January while no or little rainfall is recorded during the month of July. The rainfall events are highly localised and usually in the form of conventional thunderstorms.**

- **Topography -**

**The terrain morphological class of the area can be described as "Plains with moderate relief", either moderately or strongly undulating. The area lies at an altitude of between 1,350 and 1,800 meters above sea level, with the highest elevations occurring in the west. Several small rivers and streams flow eastward out of the Project area.**

- **Geology -**

**The area is generally underlain by sedimentary rocks of the Eccca Group, which forms part of a segment of the north eastern margin of the basin, filled with sediments belonging to the Karoo Supergroup. The sedimentary rocks were deposited discordantly on the basement, defined by the Undifferentiated Onverwacht Group, consisting of lava, tuff, schists and chert. The former forms part of the Barberton Sequence.**

**The Karoo basin in the vicinity of the Kangra Coal Project consists of the Pietermaritzburg Shale Formation at the base, followed by the Vryheid Formation and the Volksrust Shale Formation at the top, with the coal bearing Vryheid Formation being the dominant formation. Underlying the Pietermaritzburg Shale Formation is the Dwyka Formation consisting of tillites.**

**The Vryheid Formation consists of grit, sandstone and shale and contains a number of coal seams. In addition, pebble beds and intra formational conglomerate are locally developed and intercalations of siltstone and mudstone are common in the sandstone, especially in the upper part of the formation. Lenses of calcareous sandstone and sandy limestone are relatively common. The sandstone is generally feldspathic and weakly cemented, especially the coarser varieties.**

**The coal-bearing part of the Vryheid Formation contains sequential deposition of sediments represented by upward-fining cycles at the bottom with conglomerate and grit followed by sandstone, shale and eventually coal seams. These lithologies are interpreted to represent respectively the channel-lag deposit, the point-bar deposit and the overbank deposit of a meandering stream.**

**Furthermore, recent alluvial deposits occur along the larger drainage lines that traverse the area.**

**During the deposition of sediments in the Karoo basin, tension in the crust due to continuing loading lead to failure and subsequently intrusion of Post-Karoo dolerite sills and dykes along weak zones such as fractures, fissures and faults. Consequently dykes and sills varying between a few centimetres to a couple of metres in thickness intruded the Project area. Most dolerite dykes have a vertical or near-vertical dip.**

**The rocks immediately adjoining dolerite intrusions, of both dyke and sill form, are frequently disturbed and fractured, and thermally metamorphosed as a result of the injection of the dolerite and have led to varying degrees of volatilisation of coal seams.**

- **Soils and Land Capability -**



**Within the Project area, a total of seven land types occur, namely:**

- **Ac39 (red and yellow, highly weathered, structureless soils);**
- **Ba45, Ba51 (red, highly weathered structureless soils with plinthic subsoils);**
- **Bb35, Bb36 (yellow, highly weathered structureless soils with plinthic subsoils);**
- **Ca17 (Mixed plinthic and blocky clay soils); and**
- **Fa162 (shallow soils, no lime).**

**The soils were classified according to MacVicar et al., (1977), with the dominant agricultural potential class within each land type indicated in bold type.**

**In addition, most of the land types comprise predominantly either high (H) potential or medium (M) potential soils. The high potential soils are deep (>900 mm), red and yellow-brown, structureless, loamy to clayey soils of the Hutton, Clovelly, Avalon, Shortlands and Griffin forms. The medium potential soils are either these same soils, but shallower (500-900 mm), or the soils have a limitation in terms of moderate to strong structure. The low (L) potential soils include rocky areas, as well as shallow lithosols (mainly Mispah and Glenrosa soils, <450 mm deep) along with wet soils and stream bed areas.**

- **Hydrology -**

**Catchment information for the Project area is provided in Figure 10 in Annex B. Adits A and B are in the northern part of primary area "W", which includes a number of eastward draining rivers. The northern section of catchment W includes the tributaries of the Greater Usutu River with Adit A in catchment W52A located on the Ohlelo River and Adit B in catchment W51B on the Assegai (or Mkonda) River. The catchments areas are summarised in Table 2 in Annex A. The rainfall (and consequently the runoff) decreases in the westerly direction, causing the Vaal quaternary catchment to have only 72% of the runoff experienced to the east of the escarpment.**

- **Adit A - The Hlelo River, including its major tributary the Ohlelo River, is largely undeveloped with no major impoundments. Other major tributaries of the Greater Usutu River are characterized by a number of large dams which deliver water westwards to the Vaal River catchment as part of water supply augmentation schemes. The Geelhoutboom Balancing Dam (located on the northern tributary) acts as a large pumping pond where water is transferred by canal from the Heyshope Dam.**

**The major consumers extracting water from the river are industries, viz. Mondi and NTE (an agricultural chemical producer). Some water is used for irrigation in the reach below the Donkerhoek Property. There are no farm dams indicated on the available 1:50 000 topo-maps.**

**An un-rehabilitated coal mine and its associated works are situated downstream from Adit A along both sides of the Hlelo River. Discarded coal can be found on the flood plain right alongside the main channel of the river. Stormwater control dams below the product storage sites, which are outside the river floodplain, have been breached allowing contaminated stormwater to drain to the Hlelo River.**

**Current surface water use in the upper reaches of the Ohlelo River is limited to the water used by forests and alien vegetation, as well as for domestic use and stock watering. The population density in this area is low; for example only 130 families reside in the Donkerhoek Property of 8,542 ha.**

**The Ohlelo River runs adjacent to the site proposed for Adit A. The gross mean annual runoff of the Ohlelo River at the site is 2.39 million m<sup>3</sup>/a. Water use by forests (mainly alien vegetation) upstream of Adit A will, however, likely reduce this total. The 1:100 year flood peak for the Ohlelo River at this site is estimated at 220 m<sup>3</sup>/s. It is expected that this site will be overtopped and the flood width would be wider than the channel at this site.**

**The Mpumalanga Department of Agriculture, Rural Development and Land Administration (DARDLA) selected the Donkerhoek Property to be developed as a Comprehensive Rural Development Project (CRDP) in 2009. The CRDP project boundaries cross the site of Adit A. The main aim of the CRDP is**

**to provide the 130 families resident in the area with household water (to be sourced from springs in the Project area) and to improve agriculture by developing a storage dam for irrigation purposes.**

- **Adit B - The Assegai River flows eastward, to the south of the town of Piet Retief. The Heyshope Dam has been constructed 50km from the western border of primary catchment W. The dam was built to provide water to the Vaal River system. Other water users from the dam include Kangra Coal, who has a permit to abstract 830,000m<sup>3</sup>/annum (Kotze, 2010). There are no irrigation water releases from the dam.**

**The town of Piet Retief is entitled to abstract 5,500m<sup>3</sup>/day (2 million m<sup>3</sup>/a) from the Assegai River, downstream of the Heyshope Dam (Kwezi V3 Engineers, 2009). This amount was exceeded by about 30% in 2009. The Driefontein/Kwangema area use water directly from the Heyshope Dam via the transfer canal. The water to be used in these areas is treated in a treatment works, with a capacity of 1.28 million m<sup>3</sup>/a; however, water use was 0.81 million m<sup>3</sup>/annum in 2009, far below the capacity of the treatment works.**

**Adit B is situated on a tributary of the Assegai River upstream of the Heyshope Dam and the Mpundu River. Based on the total area of the catchment upstream of Adit B, the affected runoff represents approximately 540,000 m<sup>3</sup>/a, or 4.7% of the Mpundu River's runoff into the Heyshope Dam (Kangra Coal, 2009). The expected 1:100-year flood peak in the vicinity of the site has been provisionally estimated as more than 100m<sup>3</sup>/s, due to the very steep slopes in this catchment.**

- **Geohydrology -**

**Regional Hydrogeology - According to the Hydrogeological Map of the Republic of South Africa (Sheets 2630 - Mbabane and 2730 - Vryheid, 1:500 000) the main water bearing strata in the area is an intergranular and fractured aquifer made up of predominantly arenaceous rocks (sandstone and conglomerate) and argillaceous rocks (shale and siltstone).**

**According to the map, groundwater resources are generally limited, with sustainable borehole yields ranging from 0.5 - 2L/s.**

**The groundwater quality is thought to be good, with total dissolved solids (TDS) of less than 300mg/L.**

**In intergranular and fractured aquifers, the water occurs in both the upper weathered rock zone and the fractured but fresh rock formation below. These zones are in hydraulic contact. The regional aquifer system is defined as a Minor Aquifer System (Parsons, 1995) with low to moderate vulnerability to contamination. Minor Aquifer Systems can be fractured or potentially fractured rocks, which do not have a high primary permeability, or other formations of variable permeability. The aquifer extent may be limited and water quality may be variable. Although these aquifers seldom produce large quantities of water, they are important both for local supplies and in supplying base flow to rivers.**

**Local Hydrogeology - Three types of aquifer systems have been recognized in the Project area, represented by:**

- 1. Perched groundwater episodically contained in colluvial near-surface material above a less permeable substratum;**
- 2. Karoo sediment (mainly sandstone) that possess a secondary porosity associated with weathering; and**
- 3. Fractured and baked lithologies associated with the contact zone between dolerite intrusions and the sedimentary host rock (Karoo).**

- **Weathered Aquifer - The Ecca sediments are weathered to depths between 5 - 12 metres below surface throughout the Mpumalanga area. The upper aquifer, typically perched, is associated with this weathered zone and water is often found within a few metres below surface (Hodgson, 2001).**

**This aquifer is recharged by rainfall which infiltrates into the weathered rock and soon reaches an impermeable layer of shale or dolerite, underneath the weathered zone. The movement of groundwater on top of this layer is lateral and in the direction of the surface slope (Hodgson, 2001).**

**The aquifer within the weathered zone is generally low yielding (0.03 - 0.6L/s) due to its insignificant thickness. Few farmers therefore tap this aquifer by borehole. However, wells or trenches dug into this upper aquifer are often sufficient to**

**secure a constant water supply of excellent quality (Hodgson, 2001). The excellent quality of this water can be attributed to the many years of dynamic groundwater flow through the weathered sediments, where leachable salts have been washed from the system long ago (Hodgson, 2001).**

- **Fractured Aquifer - The pores within the Ecca sediments are too well cemented to allow any significant permeation of water. All groundwater movement is therefore along secondary structures, such as fractures, cracks and joints. These structures are better developed in competent rocks such as sandstone, hence the better water-yielding properties of the latter rock type (Hodgson, 2001).**

**It should, however, be emphasised that not all of the secondary structures are water-bearing. Many of these structures are closed due to compressional forces and the chances of intersecting a water-bearing fracture by drilling therefore decreases rapidly with depth. Water-bearing fractures with significant yields have been observed at depths of approximately 30m; these boreholes would, however have insufficient yields for organised irrigation (Hodgson, 2001).**

**Coal seams are often fractured and have some hydraulic conductivity. Underlying the coal is the Dwyka tillite, which is impermeable to groundwater flow due to its massive nature and fine matrix, forming a hydraulic barrier between Pre-Karoo aquifers and those high up in the succession (Hodgson, 2001).**

**In terms of water quality, the fractured Karoo aquifer always contains higher salt loads than the upper weathered aquifer. This is associated to the longer residence time of the water in the fractured aquifer (Hodgson, 2001). Although the sulphate, magnesium and calcium concentrations in the Ecca fractured aquifer are higher than those in the weathered zone, they are well within expected limits. The occasional high chloride and sodium levels are from boreholes in areas where salt naturally accumulates on surface, such as at pans and some of the springs (Hodgson, 2001).**

- **Springs - The groundwater from the weathered aquifer reappears on surface as springs where the flow paths are obstructed by a barrier, such as a dolerite dyke, paleo-**

**topographic highs in the bedrock, or where the surface topography cuts into the groundwater level at streams (Hodgson, 2001). Several springs occur throughout the Project area. These springs provide the base flow to the numerous surface water courses, which form the main source of water supply in the area.**

- **Groundwater Levels and Flow Direction - Groundwater depths range from 0 to 120 mbgl. In general, groundwater follows the topographical setting of the area. Groundwater levels are controlled by piezometric pressure in terms of the degree of confinement of aquifer systems and depth of boreholes - this indicates that boreholes in the topographical low areas tend to be artesian or have very shallow water levels (between 0 and 10 mbgl) and the boreholes on the higher elevated areas tend to indicate much deeper water levels.**

**The regional groundwater flow direction appears to be to the east. However, locally and on a small scale, flow directions can vary largely depending on topographic features.**

- **Groundwater Recharge - According to the Groundwater Resources of the Republic of South Africa Map (Sheet 2, 1995) aquifer recharge in the area is between 50 - 75mm/a.**

**The main zones of groundwater recharge are areas underlain by weathered bedrock. This aquifer is of great importance due to the higher storage capacity. Rainwater recharge to the aquifer is stored in the weathered portion of the bedrock from where it either slowly recharges the deeper fractured aquifer or daylight as seepage or springs feeding the numerous streams in the area (GCS, 2002).**

**In the Maquasa West area, recharge of the area underlain by the weathered aquifers was estimated using the chloride method to be between 10 - 20% of Mean Annual Precipitation (MAP) (GCS, 2002). In the groundwater model for the Maquasa West mine, however, a rainfall related aquifer recharge of 3 - 5% of the MAP was used to calibrate the model (Ivula, 2009).**

- **Groundwater use and Receptors - Water use in the area is mainly related to domestic use, agriculture and industrial use. The main source of water to communities and farmers in the**

**area is surface water from several perennial streams in the area, which in turn are fed by groundwater derived from numerous springs. Base flow occurs throughout the year.**

**Three groundwater abstraction points are located within the Project area and 14 more boreholes are located in close proximity to it. Water levels in the boreholes close to the Kusipongo Project area range from 0.7 to 18 mbgl, indicating shallow water levels. Borehole yields, ranging from 0.07 to 9.7l/s, are generally low with a few exceptions, where high yielding secondary structures are intersected.**

**Principal sensitive receptors in the Project area are communities using water from the streams, which are fed by groundwater, for domestic use, including drinking. Furthermore, receptors in the area include farmers using borehole water and water from streams for domestic use, for irrigation and for livestock watering.**

**The streams and rivers in the area (i.e. Hlelo, Mpundu and Klein Vaal River) are also receptors as groundwater provides them with base flow.**

- **Water Quality Assessment - Most of the determinants of the samples taken from selected springs in the Project area comply with South African Water Quality Standards (SAWQS), which indicates a good baseline water quality in the area.**

**Continuous groundwater monitoring is performed on the Maquasa West mine. Pre-mining water quality was good and most of the sampled boreholes conformed to the SAWQS (GCS, 2002). However, the current groundwater quality data show acidic pH levels for three boreholes in close proximity to the underground workings (GCS1, GCS3 and GCS4). Samples also indicate high Fe and occurrences of elevated SO<sub>4</sub> levels (GCS, 2009). Results from the sampling indicated that the geology was acid generating. It is therefore possible that the adjacent geology in the Kusipongo Resource is also likely to have acid generating potential.**

- **Noise -**

**Noise measurements were taken during the day and early morning (night time measurements) on 11 and 12 November 2011 respectively. Ambient daytime sound levels ranged between 27.7 (LA,90) and 24.9 (LA,min) dBA away from any industrial activity. Average ambient night-time sound levels (LA,90) ranged between 23.2 (LA,90) and 21.4 dBA (LA,min) away from any industrial activity. Mining activities were audible at some points at night, even though these points were relatively far away from the mining areas.**

**Based on an analysis of noise data collected, the area can be considered relatively quiet, excluding the eastern areas close to Maquasa, where mining activities alter the daytime soundscape. Due to low traffic volumes, roads do not contribute significantly to noise levels in the area.**

**The quiet environment is confirmed by the night-time ambient sound levels. While quieter than the daytime soundscape, it is still relatively noisy near the mining activities at Maquasa.**

- **Air Quality -**

- **Existing Sources of Air Emissions in the Project Area - A number of large tree plantation blocks occur between the Panbult Siding and the proposed expansion area. Albeit relatively far from the proposed mining sites, this activity could contribute some airborne dust during felling operations, although the significance of these emissions contributing to the current air quality in the Project area is likely to be low.**

**Airborne particulates are expected to be released during the cultivation of agricultural land and wind erosion of exposed areas. This would be more significant during dryer periods.**

**The existing coal mining operations at Maquasa East and Maquasa West also contribute to the ambient particulate concentrations in the region. Most of the impact at the proposed mine sites would be in the form of small particles (less than 10 micron in aerodynamic diameters). The larger particles would deposit closer to the existing mining operations. Airborne dust emissions would also originate from discard and overburden**



**heaps until rehabilitation occurs. Little dust is generated along the existing conveyor route; however, dust is generated by vehicle traffic along the public haul road to the Panbult siding. Mitigation measures to reduce fugitive dust from unpaved roads have however, been put in place**

- **Ambient Air Quality within the Region - Particulates represent the main pollutant of concern in the assessment of mining operations. The particulates in the atmosphere may contribute to visibility reduction, pose a threat to human health, or simply be a nuisance due to their soiling potential.**

**The existing Kangra Coal Mine has a dust fallout network; currently, the mine has six single dust buckets at the Panbult siding and five single dust buckets at the Maquasa East Shaft.**

**Dust fallout monitoring results for the period January 2009 to October 2010 indicate that the Residential Action level of 600mg/m<sup>2</sup>/day is exceeded occasionally at both the Panbult Siding and at the Maquasa East mine sites. Generally, the fallout measured at the monitoring stations was below the Industrial Action level. No exceedances of the alert threshold of 2,400mg/m<sup>2</sup>/day were observed.**

**No particulate air concentration measurements area available at either of these two sites.**

- **Traffic -**

**Kangra Coal is presently contributing 8% to the traffic flow on the N2 (between D2548 and Piet Retief), 78% of the D2548 traffic (between the D1091 and the Haul Road turn off) and 66% of D1091 (from the access road to the mine northwards to Driefontein). Heavy vehicles and buses associated with the mine constitute about 630 vehicles out of a total of 783 vehicles (or 80%).**

- **Visual -**

**The Project area consists of four dominant natural landscape types: mountains and rolling hills, small rivers, streams and wetlands, the Heyshope Dam to the east of the site as well as the outstretched Eastern Highveld Grasslands. Three other types,**

**mainly derived from man-made intervention, also occur within the Project Area. These include farmsteads and rural residential dwellings with their related out buildings, structures and landforms directly related to the mining activities as well as infrastructure such as the Driefontein Road and other local roads.**

- **Visual Resource - In determining the quality of the visual resource (both the objective and the subjective) all aesthetic factors associated with the landscape are considered.**

**The highest value is assigned to the Mantshangwe Mountains that runs through the middle of the Project area and the Heyshope Dam to the east. The Hlelo River, smaller streams and the wetlands are also rated high. The outstretched grasslands have a moderate visual value. The combination of natural features characteristic of these areas, stand out within the context of the region and evoke distinct and unique images to produce a strong sense of place.**

**The landscape types with the lowest scenic quality rating are the plantations, residential areas, roads and other infrastructures as well as the mining areas.**

**Scenic quality values for the various landscape types (within the Project area) vary from high to moderate. This is due to the fact that landscape types with a high scenic quality (mountains, river, streams and wetlands) are mixed with those with a lower quality (residential, roads, infrastructure and mining areas) around the site and within the Project area.**

**The sense of place can be divided into two different environments, the area to the east of the Mantshangwe Mountains and the area to the west of the mountains. The area to the west of the Mantshangwe Mountains have a rolling topography with the hills and mountains, the Hlelo River and associated streams, outstretched grassland and cultivated land. This environment emphasises the peaceful nature of the area and evokes a calm and pastoral sense of place.**

**This scene however changes once you move to the east of the Mantshangwe Mountains and enter into an environment that's been altered by the presence of manmade structures such as the**

**residential area of Driefontein, roads and the existing mining activities as well as the plantations, which consist of exotic vegetation.**

- **Visual Receptors - Potential views towards the proposed sites will be views from the Driefontein Town, rural villages / residential areas scattered throughout the site, farmsteads, and local roads as well as from similar mining activities. The Mantshangwe Mountains forms a visual screen between the proposed plant and shaft activities on the eastern and western sides of the mountains.**

**Potential sensitive viewers will include residential areas such as Driefontein Town, rural villages / residential areas as well as farmsteads. The residents located to the west of the Mantshangwe Mountains will be more sensitive to the proposed Project as there are no similar activities within this area. Residents on the eastern side of the Mantshangwe Mountains will be less sensitive as these areas already have mining activities within the views.**

**Other sensitive viewer locations will include the local farm roads, the Tweefontein Primary School as well as views along the Heyshope Dam. It should however be noted that haze plays a major role in this area and will decrease the visibility of the mining activities from the Heyshope Dam.**

## **BIOLOGICAL ASPECTS**

- **Ecological regions - Two ecological regions (Ecoregions) overlap the Project area, that of the 11.02 Eastern Escarpment Mountains and 15.05 Highveld Ecoregions respectively. Both Ecoregions extend over different parts of all three quaternary catchments found within the Project area and consequently give rise to the same three rivers namely the Hlelo, Mpundu (mostly from the Highveld Ecoregion) and Klein Vaal.**

**The Project area is located within the Mesic Highveld Grassland Bioregion which predominates throughout the higher rainfall, eastern regions of the Highveld and forms a part of the Grassland Biome. The grasses of the Mesic Grassland bioregion are considered to be sour, and suitable for livestock grazing in**

**the summer season only. The proposed expansion area for the Kangra Coal mining project spans four regional vegetation types within the grassland biome. These vegetation types are the (i) Eastern Highveld Grassland, (ii) Wakkerstroom Montane Grassland, (iii) Paulpietersburg Moist Grassland and (iv) Northern Afrotropical Forest.**

**According to the Mpumalanga Biodiversity Conservation Plan (MBCP), the highest proportion of the study site (29%) was listed as irreplaceable, this includes the proposed location of Adit A. The areas around Adits B have been classified as important and necessary. These occupy the second largest proportion of the Project area (25.8%). A similarly high proportion of the Project area (24.0%) has been listed as highly significant and predominates over the eastern and central parts of the Project area. Only 12.3% has been classified as areas of least concern with no natural habitat remaining in fragmented portions (8%) in areas of rural residence.**

- **Vegetation - All major vegetation types covering the Project area represent components of the Grassland Biome. This biome has an exceptional biodiversity, second only to the Fynbos Biome, although at a smaller spatial scale, the average species richness of the Grassland Biome is at times higher than that of many Fynbos communities. The majority of rare and threatened fauna and flora reside within the high-rainfall grasslands, and since only 2.2% of the total area is under formal protection the area is in need of urgent conservation action.**

- **Mammals - A large diversity of faunal species were confirmed for the proposed Project Project area. Research has demonstrated that the Mpumalanga Province supports a high faunal diversity, including 163 mammal species, of which 98 species fall into the small mammal category. A desktop study identified 104 species potentially occurring in the Project Area. This represents 63% of the provincial diversity of mammals.**

**The desktop review revealed 16 Red Data mammal species that could potentially occur within the Project Area. A further three species without Red Data status are listed as protected species by NEMBA. None of these species have been confirmed to occur; however, 10 species may occur on site, while an additional 5 species are highly likely to occur.**

- **Avifauna - Mpumalanga supports a highly diverse bird life, with over 567 birds recorded within the province. Of these, about 71 are Red Data species. According to the two South African Bird Atlas Projects, there are 301 bird species recorded within the Project Area. Over 10% of these species are threatened or have a Red Data status. The Desktop review lists 32 bird species having been recorded in the vicinity of the study site and having a Red Data classification.**

- **Reptiles - Species richness for reptiles in South Africa is highest in the north-eastern parts, and declining in a south-westerly direction. The areas of highest species richness correspond with the savanna biome, while the grassland biome has moderately low reptile species richness compared on a national scale. However, a large component (up to 80%) of the grassland biome has been transformed, and as a result several reptile species are of conservation concern (Alexander & Marais, 2007).**

**The list of reptiles of conservation importance that can be compiled is unfortunately inadequate as publication of the South African Reptiles Conservation Atlas (SARCA) is delayed, and the last comprehensive conservation assessments on reptiles was conducted by B. Branch in 1988 and is now very outdated.**

- **Amphibians - Published data from the South African Frog Atlas (Minter et al. 2004) was used to compile a list of 20 amphibian species that could occur within Project area. The likelihood of occurrence of two of these species is rated as "Possible" while the remaining 18 species are considered "Likely" to occur. These results place the possible species richness slightly higher than the broad trend described by Du Preez & Carruthers (2009). The habitat is particularly diverse within the vicinity of the proposed Project area, which could be an explanation for the higher than expected frog diversity there.**

**The Desktop review, however, revealed that no conservation important amphibian species could potentially occur in the Project area. Only one Red Data frog species occurs within the Mpumalanga grasslands, i.e. the Giant Bullfrog, but the nearest**

**records are quite distant from the Project area (Minter et al. 2004), and is not considered a possible species there.**

- **Terrestrial Macro-invertebrates - Two butterfly species, *Chrysoritis aureus* and *Pseudonympha swanepoeli* classified as threatened by Henning et al. (2009) could potentially occur within the Project area. The habitat is suitable for both of these species (Woodhall, 2005) ( ) but their nearest distribution records do not correlate closely with the Project area boundaries (SABCA, 2010).**

**The NEMBA schedule (2007) lists 6 protected invertebrate families for which there is the potential occurrence within the Project area. One of these families, the *Opisthacanthus* scorpions, was found to be relatively abundant on rocky outcrops within the Project area. Other families have a reasonable likelihood of occurrence within the Project area based on limited distribution data in Leeming (2003) and Dippenaar-Schoeman (2002).**

- **Aquatics - Six study sites were selected for the purposes of characterising the Present Ecological Status (PES) of the aquatic ecosystems in the Project area. Where possible, sites were selected upstream and downstream from proposed Adits.**

**Water quality assessments showed few changes from natural water constituents. All sites were impacted with high levels of organic enrichment and turbidity, which were attributed to the surrounding agricultural activities within the area.**

**The habitat integrity PES was predominantly natural in the Klein Vaal and the Hlelo Rivers. The majority of modifications to the habitat integrity was observed in the Mpundu River, associated with the infestation of a number of exotic trees including the Black Wattle, Grey Poplar and the Weeping Willow.**

**The macro-invertebrate integrity at all of the sites showed generally few modifications, ranging from natural to moderately modified. At Sites 3 and 4, the macro-invertebrates indicated near natural macro-invertebrate integrity, with the presence of relatively rare and sensitive macro-invertebrate families. Although none had any conservation status, the generally high scarcity of such macro-invertebrate assemblage**

**integrity in South Africa, highlights the need for the conservation of the upper Hlelo River system.**

**The PES of the ichthyofauna assemblage ranged from near natural to moderately modified. Although none of the fish species were characterised as having a conservation status, numerous species were present in the Hlelo River catchment that have relatively low distributions and high sensitivities to ecosystem modifications. In addition to this, the presence of the Near Threatened Barbus species, *B. brevipinnis*, could not be discounted in the Hlelo tributary. These results highlight the sensitivity of the Hlelo tributary and consequently the need for the appropriate conservation and protection of the fish species in the upper Hlelo tributaries, downstream from the proposed sites of Adits A and the former Adit C, as was shown in the macro-invertebrate assemblages.**

**In contrast, the sites situated in the Mpundu catchment show relatively low fish community integrities, albeit natural.**

- **Wetlands - The proposed Project area is in a high rainfall area and Sandstone and Dolerite dykes are a prominent feature of the geology and are cause for considerable linkage between surface and ground water systems. Wetlands are thus widespread within the area and are dominant features covering a large area of the landscape.**

**The general area is mountainous with plateaus, numerous steep slopes facing various directions and valley bottoms. Some valley bottoms are wide landscape features, whereas others are narrow steep kloof-like landscape features. The multitude of terrain forms give rise to numerous wetlands of diverse characteristics.**

**An intricate network of wetlands and drainage lines exists within the proposed Project area, and almost all types of wetlands described by DWAF (2007) can be identified there.**

2.7. Provide any relevant additional information.

**N/A**

3. Identification of the anticipated environmental, social or cultural impacts, including the cumulative impacts, where applicable.

3.1. Provide a description of the proposed project including a map showing the spatial locality of infrastructure, extraction area, and any associated activities.

**The scope of the proposed Project involves the development of an underground working in the Kusipongo Resource at Adit A, which is situated westwards of existing operations, and a ventilation Adit (Adit B) (refer to Table 3 in Annex A and Figure 11 in Annex B). The resource consists of two coal seams, namely the Gus Seam - which is typically 3.5 to 4m thick, and the Dundas Seam - which is typically 1.6m to 2.0m thick. The proposed mine will be restricted to underground mining, with coal reserves having been located up to a depth of 300m below the surface. The anticipated ROM production volume is expected to be between approximately 3.6 and 3.8Mtpa (provided both seams are mined concurrently), with the majority of product being exported for use as thermal coal. The proposed mine is estimated to have a lifespan of approximately 10 to 20 years. The means of underground mining will employ board and pillar methods, using continuous mining equipment.**

**Starting with a project pre-feasibility assessment carried out by Hatch in 2010/11/12 a single main mine Adit, associated ventilation shaft, a connecting conveyor belt and the expansion of the existing discard dump were identified as the core infrastructure for the proposed Kusipongo resource expansion project. The centre point localities of the aforementioned Adits are included in Table 3 of Annex A and the location of the proposed Kusipongo Expansion mine site infrastructure is provided in Figure 11 in Annex B.**

**The majority of the surface infrastructure associated with the proposed expansion Project, such as a coal beneficiation plant and material handling facilities, is located on the existing Maquasa East, Maquasa West and Maquasa West Extension properties. This infrastructure will continue to be used for the processing of coal reserves from the proposed Kusipongo reserve.**

**Coal will be transported from the proposed Main Mine Adit (Adit A) in the Kusipongo Resource to the existing Maquasa West Adit via the proposed new overland conveyor system. From there it is proposed that the overland conveyor system feeds into the existing overland conveyor system, which will then transport coal to the existing Maquasa East Coal beneficiation plant.**



**Washed coal will continue to be trucked to the existing Panbult siding for distribution to both the inland market and the RBCT for export.**

**It is proposed to use the following facilities that already exist at the Maquasa West and East sites:**

- **Main administration building;**
  - **Induction, medical and training facilities;**
  - **Electrical substation;**
  - **Light vehicle workshops;**
  - **Main mine stores;**
  - **Discard dump (this will need to be expanded to accept coal discard over a period of 20 years at a average rate of 1,550,000m<sup>3</sup> per year). The management of discard is a fundamental part of the proposed Project. All discard produced by the proposed Project will be handled at the existing Maquasa Plant and associated discard facility. The detailed assessment of the final option relating to the discard dump will not be included in this study, as it is currently being undertaken by Groundwater Consulting Services (Pty) Ltd. (GCS) as part of their application for amendment to a Section 102 application in terms of the Mineral and Petroleum resources Development Act, 2002 (Act No. 28 of 2002) (MPRDA), to include an additional eight new opencast pits and potential two new underground mining areas accessed from the opencast pits (refer to Figure 13 in Annex A);**
  - **Coal beneficiation plant; and**
  - **Materials handling facilities.**
- **Adit A - Main Mine Adit - Adit A will also include within its footprint ventilation shafts; however, it will be designed in such a way to allow workers, materials and machinery access to underground mining operations (inclined adit). The inclined adit will provide for a conveyor to bring mined coal to the surface. The construction footprint of the Adit A is approximately 184,709m<sup>2</sup> (refer to Figure 12 in Annex B, showing the layout of Adit A - the Main Mine Adit).**

**In addition, the following facilities are proposed and will be developed in association with the Main Mine Adit:**

- **Electrical distribution substation, switch gear and step-down transformers. Emergency back-up generators will also be included. These will be installed in the form of an electrical substation and generator building;**
- **Mechanical and electrical workshops for underground mining equipment;**
- **Satellite stores and a magazine building, associated storage and salvage yards;**

- **Locker-room facilities for 300 mine workers, including a sanitation system, sewage treatment plant with an associated sewage sludge treatment facility;**
  - **Lamp room and crush facilities;**
  - **Ventilation fans and associated ducting (4x ventilation fans);**
  - **Administration offices;**
  - **First aid facilities;**
  - **Chemical and paint stores and a fuel and oil depot to accommodate a cumulative volume of between 80 - 500m<sup>3</sup>;**
  - **A security fence around the perimeter of the property and substation;**
  - **A security (guard) house;**
  - **A bus shelter and bus turnaround facility;**
  - **A total of 48 above ground parking bays;**
  - **Additional parking for underground vehicles located near the surface workshops;**
  - **Truck lay by areas;**
  - **Silt traps which will accommodate and settle out fines;**
  - **The stormwater management system is designed to have a total storage capacity of 21,200m<sup>3</sup> over two ponds. The smaller stormwater management pond will be 8,200m<sup>3</sup> in size, whereas the bigger pond (Emergency Evaporation Pond) will be 13,000m<sup>3</sup> in size. The Emergency Evaporation Pond will only be used once capacity in the 8,200m<sup>3</sup> has been reached;**
  - **A groundwater balancing dam with an approximate size of 4,000m<sup>3</sup>;**
  - **A wash bay that will be used for the washing of mining equipment and light duty vehicles;**
  - **Brake test ramp for mine vehicles;**
  - **Temporary waste facilities to accommodate general (domestic, recyclables, etc.) and hazardous waste (used oil, solvents, spent batteries, contaminated rags, overalls, descants, etc). The area designated for the storage of hazardous will not be greater than 35m<sup>3</sup>; however, the area designated for the temporary storage of general waste will exceed 100m<sup>3</sup>;**
  - **Lime silo (used for white-wash and dust control underground);**
  - **Product silos (2 x approximately 7,000 ton carrying capacity) for the storage of mined coal;**
  - **Primary and secondary screening and crushing positioned on conveyors plus a recycle conveyor belt, feeder breaker and recycle chute;**
  - **Adit rock dump (area - 12, 738m<sup>2</sup> and volume - 70, 000m<sup>3</sup>) in the north western corner of the Main Mine Adit; and**
  - **An access road through to the Adit.**
- 
- **Ventilation - Ventilation at Adit A will supply the main fresh air ventilation intake and exhaust; however, ventilation Adit B will be used solely for ventilation intake. Adit B will include only**

**a ventilation opening. Access to the underground working via this ventilation opening will be restricted by the installation of a metal grid that will prevent access by humans and animals. Adit B will require approximately 28, 600m<sup>2</sup> in surface area. Fresh air drawn in through this adit will be returned directly to the main exhaust fans at Adit A. Ventilation design has taken into account parameters such as known in-seam methane gas contents, which is evident in the neighbouring Maquasa West mine.**

**Please Note - It is estimated that ventilation Adit B will be constructed approximately five years after construction of the Main Mine Adit (Adit A) is initiated; or approximately six years after the first coal is produced from Adit A.**

- **Conveyor Route - In order to transport mined coal from Adit A to the coal beneficiation plant on the existing Maquasa East site, it is proposed to construct an overland conveyor belt, which will tie into the existing conveyor system at the existing Maquasa West Adit. Included in this conveyor corridor will be overhead transmission lines (OHTL), gravel service road and a security fence (fenced width of 32 meters). This proposed corridor will traverse three wetlands, four stream crossings and will encompass five implement/vehicle crossings. Coal will then be transported along the existing conveyor system from the Maquasa West Adit through to the Maquasa East coal beneficiation plant.**

**Water will be initially supplied to the proposed Adit A from the existing facilities at Maquasa West Adit. The pipeline will follow the proposed new conveyor corridor between the Maquasa West Adit and Adit A.**

- **General/Hazardous Waste Management - Design aspects of the proposed Project will take into account measures that will ensure that waste generation during the operational (mining) phase is kept at a minimum and effectively managed.**

**Kangra Coal will establish a waste management programme, which will identify opportunities to avoid, reduce, reuse, recycle, recover or suitably dispose of each waste type produced. All waste generated on-site will be segregated into either hazardous or non-hazardous waste and temporarily stored in dedicated on-site waste storage facilities. Waste materials that can be recycled or reused in a manner that will not result in unnecessary environmental pollution will not be disposed of. For those waste types that cannot be reused or recycled, these will be disposed of at a suitably licensed waste disposal facility.**

- **Mining Wastes - An Adit rock dump with an area and volume of 12, 738m<sup>2</sup> and 70, 000m<sup>3</sup> respectively is proposed at the north western corner of the Main Mine Adit A. As part of the mine expansion, coarse and fine coal with a low unmarketable grade will be produced. The existing discard facility that is currently being used to discard such coal for the Maquasa West and Maquasa East mining operations will be used. As was mentioned earlier in this scoping report, the detailed assessment of the final option relating to the discard dump will not be included in this study, as it is currently being undertaken by GCS as part of their application for amendment to a Section 102 application in terms of the Mineral and Petroleum resources Development Act, 2002 (Act No. 28 of 2002) (MPRDA), to include an additional eight new opencast pits and potential two new underground mining areas accessed from the opencast pits.**

- **Potable Water Supply - Potable water requirements were estimated based on an assumed consumption of 150 L/capita/day. The labour force is anticipated to have around 310 people for the morning shift (10 hrs), 130 people for the afternoon shift (10 hrs), 15 people for the maintenance shift (4 hrs) and 85 people at all time for the Main Mine Adit. As such, 45m<sup>3</sup> is determined to be the daily potable water requirement. Boreholes are envisaged to be the only source for potable water. Potable water will be sourced from a groundwater borehole identified as ERMBH03 (27° 00' 38.4455" S and 30° 17' 14.1128" E). This borehole was suggested by ERM as the best suited borehole for providing potable water to the complex. The borehole meets the required yield of 0.52 L/s pumped continuously over 24 hours a day. The borehole yield test was performed by ERM. The volume available has been estimated at 45m<sup>3</sup>/day.**

**A 24-hour, elevated potable water supply tank will be erected at the complex and will serve to accommodate peak flow requirements.**

- **Surface Water Management at the Main Mine Adit - Surface water management within the Main Mine Adit will restrict any unpolluted water to a clean water system external to the Adit complex. This will be accomplished with earthfill berms, designed to divert clean stormwater runoff associated with a 1-in-100, 24 hour storm event. An interior/exterior diversion berm slope of 3:1 (H:V) will be assumed.**

**Impacted 'dirty' stormwater runoff within the Main Mine Adit footprint (including waste water emanating from the waste rock dump) will be collected and routed to the two stormwater management ponds for sedimentation of insoluble particulate. The 'dirty' stormwater will pass through a silt trap before entering the stormwater management pond.**

**The two stormwater management ponds are sized to accommodate the 1-in-100, 24 hours rainfall event. The two ponds are therefore designed to have a total storage capacity of 21,200 m<sup>3</sup>. The smaller stormwater management pond will be 8,200 m<sup>3</sup>, whilst the larger Emergency Evaporation Pond will be 13,000m<sup>3</sup>. The larger Emergency Evaporation Pond will only be used in the event that capacity in the smaller 8,200m<sup>3</sup> pond is reached.**

**Upon sedimentation of solids at the Stormwater Management Pond, it is expected that the stormwater will meet the discharge requirements, prior to release to the natural environment. In the 1:100, 24 hours rainfall event, the retained water volume is expected to flow from the Stormwater Management Pond to the Emergency Evaporation Pond. The Emergency Evaporation Pond should be operated such that retained water is released as soon as possible after each storm event.**

- **Mine Inflow Management - The mine inflow is expected to supply cooling water for the continuous miners. Underground storage of excess water is possible and will be considered in the overall water balance. A portion of the water will be reused underground for dust suppression and in cooling mining machinery. This decanted groundwater will also be used on surface for service water and dust suppression. Chemical treatment is not necessary for these two uses. The balancing and service water dam is sized to be 4,000 m<sup>3</sup>.**

**None of the decanted groundwater will be used in coal beneficiation at Maquasa East. Water used for beneficiation at Maquasa East is obtained from the current discard facility return water and a licensed abstraction from the Heyshope Dam.**

- **Sewage Treatment - Sewage generated from offices, change houses and ablution blocks at the Main Mine Adit will be collected and routed to a pump station and pumped to an above ground sewage treatment plant (STP; refer to Figure 11 in Annex B). The STP will be a packaged plant based on extended aeration or sequencing batch reactor processes, designed to treat a daily flow rate of 41m<sup>3</sup> (or 14,965m<sup>3</sup> per annum). The STP will include an inlet bar screen, equalisation tank, pumps and blowers for the primary and secondary treatment of raw sewage to reduce total suspended solids (TSS) and the biochemical oxygen demand (BOD). The equalisation tank will provide normalisation of the influent sewage flow rate, and homogenisation of the sewage characteristics. Secondary treatment will provide aeration for the biological treatment of organic matter and the reduction of BOD. Tertiary treatment will**

**provide disinfection of the treated effluent prior to discharge to the natural water course, as per the DWA limits. The STP will also include aerobic sludge stabilisation, suitable to render the product acceptable for final disposal in agricultural use. The aerobically stabilised (digested) sludge will be available for use as a partial fertiliser. Toilet facility requirements for the underground workings will be met with water-less toilets that will be periodically brought to the surface for pumping to the STP.**

- **Waste Water Treatment - It is not envisioned at this stage of design that wastewater treatment will be required; however, should this be unavoidable, several treatment technologies are available for the removal of iron and other metals as well as sulphate from waste water.**

**The selection of an appropriate water treatment process will be dependent on the final design conditions around the pumped mine water volume, water qualities and the flow conditions in the receiving watercourse. ERM will provide the parameters from their water models. Several 'best available' technologies were considered, including:**

- **Nanofiltration and precipitation of gypsum ( $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ ) from the resulting concentrated brine**
- **Precipitation of sulphate as barium sulphate ( $\text{BaSO}_4$ )**
- **$\text{BiO}_x$  sulphate removal**
- **Ion exchange**

**Nanofiltration and precipitation of gypsum was selected as the preferred technology for this phase of the project; however, this should be reviewed once advanced data is available on the excess water quantity and quality. This process will produce brine and filter press cake which will be temporarily stored and removed from the premises by a licensed waste management company.**

- **Excess Water Discharges into the Natural Water Resource - As a last resort, excess decanted mine water will be discharged into a natural water source. Treated sewage shall be discharged as per treated municipal sewage.**

**The daily volume of treated sewage water, is expected to be approximately 41m<sup>3</sup>/day and will report to the balancing dam for use as service water (as above).**

- **Access Routes - Access to Adit A is proposed to be along the existing district road (D2548). Gravel service roads through to ventilation Adits B is proposed to follow the alignment of existing farm tracks.**

- **Transmission Lines - Overhead 22kV transmission lines (OHTL) are proposed to supply power from Maquasa West to Adit A (along the conveyor route).**

- **Contractors Camp (Temporary) - In order for the aforementioned infrastructure to be developed, a temporary contractor's camp will need to be established during the construction phase of the Project. The camp will be used to accommodate semi-skilled, skilled/artisanal and supervisory workers for the duration of construction. The motivation for having to have a contractor's camp onsite is as follows:**

- **There is insufficient existing accommodation that is appropriate for the construction labour force in nearby communities (like Driefontein).**

- **It is preferable to accommodate the construction labour force on-site, so as to reduce the potential negative impacts associated with worker-community interaction.**

- **On-site accommodation will reduce the amount of travel required by workers to get to the construction sites which greatly improves the efficiency of the construction programme.**

**The design of the contractor's camp has taken into account the following assumptions:**

- **The camp will not accommodate workers from the local community. These workers will reside in their communities and travel to site on a daily basis. This will ensure that local family units are maintained during the construction phase.**

- **The construction phase is approximately 2 years.**

- **The construction workforce will comprise of a maximum number of approximately 450 people. Of this, it is estimated that approximately 250 skilled people will come from outside the local area or region and will require accommodation on-site with the remainder of the workforce being accommodated in their local community or in the case of engineers and related professions, in guesthouses in Piet Retief.**

- **Of the 250 people on site, 50 are expected to be supervision staff, 100 skilled staff and 100 semi-skilled staff.**

- **All accommodation structures installed as part of the construction village are likely to be of a temporary nature and will be removed by the relevant service providers.**



• **As a general rule, accommodation units are categorised as follows:**

- o **Supervision Staff - One per room with a shared ablution facility (two per ablution unit).**
- o **Skilled/Artisan Staff - Two per room with shared ablution facility (four per ablution unit).**
- o **Semi-skilled Staff - 22 per dormitory-type unit with a common ablution facility.**

**The total surface area requirement for the contractor's camp is approximately 2.5ha. The construction village will require approximately 35m<sup>3</sup> of potable water per day to be obtained from the same borehole that is to be used for the Main Mine Adit A. A storage volume of 66m<sup>3</sup> will be provided in aboveground tanks.**

**Solid waste will comprise of typical domestic waste including glass and plastic bottles, food waste, packaging, waste timber and waste cabling. Hazardous wastes produced within the construction village which will require disposal are expected to be limited to aerosol containers, batteries, and empty hazardous chemical (paint, cleaning products etc.) containers.**

**The estimated quantity of general solid waste ( ) expected to be produced on site on a monthly basis is 23 m<sup>3</sup>. The estimated quantity of hazardous waste to be produced on a monthly basis is 3m<sup>3</sup>.**

**General and hazardous waste will be segregated and suitably stored in a temporary waste handling facility on-site and collected by a reputable waste contractor for suitable disposal to an appropriately licensed waste disposal site.**

**The contractor's camp will produce sewage effluent (black water) and effluent from the kitchen, laundry, showers and basins (grey water). A portable sewage treatment package plant comprising of tanks fitted in series will be utilised for treatment of the sewage. Treatment will consist of 4 phases, namely - a septic tank, a bioreactor, a clarifier and sterilisation. Treated effluent will be used for irrigation within the contractor's camp (gardens, recreational sports field etc). Grey water will be treated in a separate treatment plant and the treated water pumped back for reuse in the showers and kitchens.**

**Power on-site may be provided via a diesel generator capable of producing 164 kW of continuous power. Alternatively, the contractors' camp will be linked to the overhead power line to be installed within the proposed overland conveyor servitude.**



3.2. Describe any listed activities (in terms of the NEMA EIA regulations) which will be occurring within the proposed project.

**The NEMA provides the environmental legislative framework for South Africa. The NEMA Environmental Impact Assessment (EIA) Regulations provide two categories of activities, namely GN.R544 activities, which potentially only require a Basic Assessment before authorisation, and GN.R545 activities, which potentially require a comprehensive assessment (Scoping and an EIA). In other words, GN.R544 activities are perceived to have a lower impact than GN.R545 activities. The following includes listed activities that are deemed to be applicable to the Project.**

**GN.R544 (11) - This activity will be triggered, as the infrastructure proposed is in excess of 50m<sup>2</sup>. Furthermore, culverts will be constructed across streams to allow access over the conveyor system (including the service gravel road, which will run parallel with the conveyor route).**

**GN.R544 (13) - This activity will be triggered, as the proposed project includes the construction of a fuel depot, oil store, chemical store and a paint store. At this stage, the quantity of dangerous goods that are to be stored onsite is uncertain. For this reason, the assumption will be made that capacity will be between 80 and 500m<sup>3</sup>.**

**GN.R544 (22) - This activity will be triggered, as roads which are 8m wide will be constructed.**

**GN.R544 (24) - This activity will be triggered, as the proposed project will be transforming land (in excess of 1,000m<sup>2</sup>) which is currently undeveloped to industrial (mining).**

**GN.R544 (47) - This activity will be triggered, as existing farm roads will have to be extended for a length of more than 1 kilometre.**

**GN.R545 (15) - This activity will be triggered, as an area in excess of 20 hectares, which is currently green fields, is proposed to be developed for mining purposes. NEMA does not provide a definition for industrial land use; as a result, for the purpose of this application mining is classified as a variant of industrial use.**

**GN.R546 (4) - This activity will be triggered, as the Mpumalanga C-Plan Terrestrial Biodiversity Assessment identifies part of the project area as irreplaceable, whilst other areas are classified as important and necessary. As part of the proposed project roads, which are wider than 4m, will be constructed.**

**GN.R546 (12) - This activity will be triggered, as the Mpumalanga C-Plan Terrestrial Biodiversity Assessment identifies part of the project area as irreplaceable, whilst other areas are classified as important and necessary. As part of the project an area exceeding 300m<sup>2</sup> will be cleared of indigenous vegetation.**

**GN.R546 (13 and 14) - This activity will be triggered, as the Mpumalanga C-Plan Terrestrial Biodiversity Assessment identifies part of the project area as irreplaceable, whilst other areas are classified as important and necessary. Furthermore, the National Spatial Biodiversity Assessment identifies part of the project area has been located on the border of the South African Eastern Escarpment and Moist Grasslands. As part of the project an area exceeding 1 hectare in size will be cleared of vegetation. Over 75% of the vegetation which is proposed to be cleared is deemed to be indigenous. The removal of vegetation is required for the purposes of expanding existing mining operations.**

- 3.3. Specifically confirm that the community and identified interested and affected parties have been consulted and that they agree that the potential impacts identified include those identified by them.

**As is mentioned in Section 1.11 of this report, communities and interested and affected parties have been consulted about the proposed Project through activities associated with the pre-scoping phase. To date, comments have been received around issues relating to groundwater, water quality, air quality, socio-economics, communities, the environment and existing buildings and infrastructure (see Annex F for the Comment and Response Report). All these issues have been identified as potential impacts in the Scoping Report and will be assessed in the Environmental Impact Assessment Report in detail.**

**Furthermore, as is described in Section 1.11 of this report, during disclosure of the Draft Scoping Report developed under the requirements of the NEMA a public meeting, open house and focus group meetings will be held with various stakeholders. All**

**comments, issues of concern and suggestions received from stakeholders during these engagement activities will be captured in an updated comment and response report, which will be included in the Environmental Impact Assessment Report, which will be lodged with the Department of Minerals and Resources before 27 May 2013.**

3.4. Provide a list and description of potential impacts identified on the cultural environment.

3.4.1. Provide a list and description of potential impacts identified on the heritage environment, if applicable.

**The following cultural and heritage resources (in particular graves) have been identified in the vicinity of the Project area:**

- **Graveyards dating from the historical period (older than sixty years) or from the recent past;**
- **Homesteads dating from the historical period (older than sixty years) or from the recent past; and**
- **Colonial farmstead complexes consisting of farmhouse, cattle enclosures and graveyards which date from the second half of the nineteenth century and from the early twentieth century. When such structures and features are spatially associated with each other in time and space they may constitute small cultural landscapes.**

**The potential to impact on identified cultural and heritage resources (and in particular graves) in the area is significant, as they will have to either be avoided or relocated.**

**As a result of the presence of these cultural and heritage resources found in the Project area, a Heritage Impact Assessment (HIA) is required to fulfill all the requirements of the National Heritage Resources Act. As such, a full Cultural and Heritage Impact Assessment will be conducted as part of the EIA process.**

3.4.2. Provide a list and description of potential impacts identified on the socio-economic conditions of any person on the property and on any adjacent or non adjacent property who may be affected by the proposed prospecting or mining operation.

**Of most relevance to the proposed Project is the fact that work seekers residing in the applicable Wards outnumber**

**the number of people employed by just over 2:1. The affected Wards have a large labour pool, with 51% of the population falling within the working age; however, the workforce is largely uneducated, with only 7% of the population across the Wards having a Grade 10 or Grade 12 certificate. This has resulted in generally low income levels, with approximately 16% of households earning between R1 to R4, 800 per month. In addition, within the applicable Wards, there is a general lack of services (such as health care facilities, public transport, refuse removal, access to piped water supplies etc).**

**Landowners/residents located in the Project area will be affected by the Project. Although not within the scope of this EIA, people living directly within the Project area will need to be compensated and/or resettled.**

**The Project has the potential to result in both negative and positive social impacts. Working within the current framework of Kanga Coal's SLP, this Project will need to aim at enhancing the positive impacts resulting from this Project and minimizing any negative social impacts which may arise as a result of the Project.**

**In order to satisfy the full scope of work envisaged for the social baseline study (i.e. primary data collection) and to provide a firm foundation for the Social Impact Assessment, further social specialist input in the form of a Social Impact Assessment (SIA) will be required during the EIA phase of the study.**

- 3.4.3. Provide a list of potential impacts (positive & negative) on: employment opportunities, community health, community proximity, and links to the Social and Labour Plan.

**Refer to Section 3.4.2 above.**

- 3.4.4. Provide a list and description of potential impacts identified on the biophysical environment including but not be limited to impacts on: flora, fauna, water resources, air, noise, soil etc.

**The determination of anticipated impacts associated with the proposed expansion Project is a key component to the EIA process. The project is likely to have impacts on the following physical properties of the area:**

- **Climate** - climate will influence, in particular, the dispersion of air pollutants, the extent of noise impacts, the degree of groundwater recharge, and the surface water flows (and floods) of surface water features prevalent in the Project area. In this project, climatic inputs are therefore used as inputs into the various models used to quantify the nature and extent of such impacts. Although the Project will also contribute to Greenhouse Gas (GHG) emissions, the expansion will not increase the ROM throughput, but rather the lifespan of the current operations, as current mining reserves within existing mining rights are diminishing. As such, no climatology specialist studies are deemed necessary for the EIA phase of the study.
- **Topography** - Local topography and geomorphology will influence a wide range of environmental and social aspects. The undulating topography and the Mantshangwe Mountains in particular, will influence, for example, the visual impacts posed on receptors to the west of this range. The topography and geomorphology will also influence the dispersion of noise impacts, air pollutants, and surface and groundwater levels and flows. The topography and geomorphology of the Study Area will be considered as input into the various models used to quantify the nature and extent of such impacts. As such, no topographic or geomorphologic specialist studies are deemed necessary for the EIA phase of the study.
- **Geology** - Although underground mining of the Gus and Dundas coal seams in the Kusipongo reserve will have a direct impact on the geology of the area, no specialist geology study is anticipated for this EIA. Rather, the impact of the geology on the behavior of groundwater, and of underground mining on the quality of groundwater resources will be investigated in detail. As such, no geological specialist studies are deemed necessary for the EIA phase of the study.
- **Soils and Land Use Capability** - The establishment of the mine adits and associated infrastructure will result in the removal of topsoil. In addition, the removal of vegetation during construction may lead to accelerated soil erosion and degradation of overall soil productivity. The mining expansion Project is proposed on land that has a medium to high agricultural potential. As such, the proposed mining Project will contribute to a reduction in land that is suitable for agriculture. In order to gain a full understanding of how the proposed Project will potentially impact on the soils and land use capability of the area a Soil

**and Land Use Capability Impact Assessment will be conducted as part of the EIA process.**

- **Hydrology - Hydrology covers all surface water features located within the Study Area, including riverine systems, tributaries, associated riparian areas and wetlands. Most importantly, the Study Area covers the headwaters of the Ohlelo, Assegaai and Klein Vaal rivers, and the quality of these headwaters is deemed to be close to natural. Risks associated with hydrology to the proposed Project include risks to mine adits and associated infrastructure as a result of flooding. Furthermore, the Project has the potential to pollute hydrological resources in the immediate area, either through groundwater contamination, waste water generation as part of coal processing, the generation of acid mine drainage, or the mixing of dirty water with clean runoff water during high intensity rainfall events. In order to gain a full understanding of how the proposed Project will potentially impact on the hydrology of the area a full Hydrological Impact Assessment will be conducted as part of the EIA process. This specialist report will also serve to assess the risks due to flooding of mine adits and associated infrastructure.**

- **Hydrogeology - Contamination sources associated with underground coal mining and coal storage are generally related to the following:**

- **Mine dewatering;**
- **AMD and related water contamination; and**
- **Post closure decanting.**

**Source areas will be determined primarily by the final location of the Adits, the extent of the underground mine, the location and extent of waste rock dumps, and local topography.**

**Receptors using groundwater for domestic use (irrigation and drinking) could be negatively affected by mine dewatering and groundwater contamination. Ecosystems related to the numerous groundwater fed streams, springs and wetlands in the area are also receptors and could also be negatively impacted through mine dewatering and groundwater contamination.**

**Pre-mining water quality is good and most of the sampled boreholes conformed to the South African Water Quality Standards (GCS, 2002). Continuous groundwater monitoring performed on the Maquasa West mine shows**

**acidic pH levels for three boreholes in close proximity to the underground workings. Samples also indicate high iron and occurrences of elevated sulphate levels (GCS, 2009). From these results, it is concluded that AMD has occurred, indicating a potential for AMD in the adjacent Kusipongo mine area if not better managed.**

**In order to gain a full understanding of how the proposed Project will potentially impact on the geohydrology of the area a full Geohydrology Impact Assessment will be conducted as part of the EIA process. This study will be complemented by a geochemical study to understand the impacts of, or potential for, AMD resulting from the proposed Project.**

- **Noise - The main sources of noise pollution as a result of the proposed Project are likely to include the movement of heavy haul trucks and other vehicles, ventilation fans and the conveyor belts.**

**Given the location of sensitive receptors (notably residential dwellings and the Twyvelhoek Primary School) in proximity to the proposed main mine adit, coupled with the current low ambient noise levels, it is highly likely that the Project will have a noise impact.**

**Given that noise impacts are highly likely to occur as a result of the proposed Project, a full Noise Impact Assessment will be conducted as part of the EIA process.**

- **Air Quality - The main source of air pollution in coal mining and production primarily consists of fugitive sources of particulates. Particulates are generally constituted of coal dust generated during excavation and transport, as well as dust resulting from vehicle entrainment on gravel access roads. The nature and severity of the impact will be determined by the volumes of emissions generated, the spatial distribution of emissions, the location of sensitive receptors and prevailing wind conditions. Given the location of sensitive receptors in proximity to the proposed Main Mine Adit, it is highly likely that the Project will have an impact on air quality.**

**Given that air quality impacts are likely to occur as a result of the proposed Project, an Air Quality Impact Assessment will be conducted as part of the EIA process.**

- **Traffic - A detailed traffic baseline assessment has been completed for the proposed Project. Traffic is expected to increase slightly during the construction phase**



**of the proposed Project; however, operational phase traffic associated with the new mine is not expected to significantly increase current traffic flows, as mining output will remain the same.**

**As operational phase traffic associated with the new mine is not expected to significantly increase current traffic flows (as mining output will remain the same), it can be assumed that there will be no additional impacts arising from the proposed Project on current traffic volumes on the main access routes to the mine. As such, no further traffic studies are deemed necessary for the EIA phase of the study.**

- **Visual - It is likely that visual impacts will result from the construction and operation phases of the proposed Project. The Main Mine Adit will likely be visible from farmsteads and rural villages/residential areas to the west of the Mantshangwe Mountains. These viewsheds are considered sensitive owing to the general lack of development in this area, and the resultant “sense-of-place”.**

**Given that visual impacts may occur as a result of the proposed Project, a Visual Impact Assessment will be conducted as part of the EIA process.**

- **Biological Environment - The proposed Project is located in an ecologically sensitive area. In summary, the highest proportion of the study site (29%) was listed as irreplaceable in the Mpumalanga Biodiversity Conservation Plan, the Project is located within the Grassland Biome, which is recognised to have an exceptional biodiversity, a large diversity of faunal species is confirmed for the proposed Project area, and the rivers and streams in the Project area showed water quality, habitat integrity, macro-invertebrate integrity and fish assemblages to be close to natural conditions. Furthermore, an intricate network of wetlands and drainage lines exists within the proposed Project area, and almost all types of wetlands are present in the Project area.**

**Given these sensitivities, a full Ecological Impact Assessment (including flora, fauna, aquatic ecology and wetland delineation studies) will be conducted as part of the EIA process.**



- 3.4.5. Provide a description of potential cumulative impacts that the proposed operation may contribute to considering other identified land uses which may have potential environmental linkages to the land concerned.

**Cumulative impacts and effects are those that arise as a result of an impact and effect from the Project interacting with those from another activity to create an additional impact and effect. These are termed cumulative impacts and effects. Other activities in the area that could result in cumulative impacts include other mining Projects, current mining operations carried out by Kangra Coal, future developments in the area, etc.**

**The impact assessment process in the impact assessment phase of the EIA will predict any cumulative impacts/effects to which the Project may contribute. The approach for assessing cumulative impacts and effects resulting from the Project and another activity affecting the same resource/receptor is based on a consideration of the approval/existence status of the 'other' activity and the nature of information available to aid in predicting the magnitude of impact from the other activity.**

**At this stage cumulative impacts are likely to be associated with ecological, hydrogeological, hydrological and social aspects.**

4. Land use or development alternatives, alternative means of carrying out the proposed operation, and the consequences of not proceeding with the proposed operation.

- 4.1. Provide a list of and describe any alternative land uses that exist on the property or on adjacent or non-adjacent properties that may be affected by the proposed mining operation.

**At this stage the only known alternative land uses existing on the Project area or immediate surroundings include commercial livestock and tree plantation farming and informal residence.**

**More alternative land uses will be become apparent during the impact assessment phase of the Project.**

- 4.2. Provide a list of and describe any land developments identified by the community or interested and affected parties that are in progress and which may be affected by the proposed mining operation.

**The Mpumalanga Department of Agriculture, Rural Development and Land Administration (DARDLA) selected the Donkerhoek Property to be developed as a Comprehensive Rural Development Project (CRDP) in 2009. The CRDP project boundaries cross the site of Adit A. The main aim of the CRDP is to provide the 130 families resident in the area with household water (to be sourced from springs in the Project area) and to improve agriculture by developing a storage dam for irrigation purposes.**

**At present two sites for the construction of a storage dam are being investigated, namely a dam on the Hlelo River in Twyfelhoek and a dam on a Prospect Farm on a local tributary. A site for this dam was also considered at the site of Adit A but it was found to be less favorable than the other localities, and is no longer being considered.**

**Other than the above, there are no known land developments by communities or I&APs at this stage of the EIA process.**

**As was mentioned earlier in this report, Kangra Coal (in addition to this Project) are proposing to develop an additional eight new opencast pits and potential two new underground mining areas accessed from the opencast pits at the existing Maquasa Works.**

- 4.3. Provide a list of and describe any proposals made in the consultation process to adjust the operational plans of the mine to accommodate the needs of the community, landowners and interested and affected parties.

**At this stage of the process, no adjustments on operational plans have been made as a result of community, landowner and I&AP consultation.**

- 4.4. Provide information in relation to the consequences of not proceeding with proposed operation

**Coal is one of the most precious minerals in the world and is the largest source of energy, providing 27% of the global**

**primary energy needs and generating 41% of the world's electricity (World Coal Association, 2011). South Africa possesses Africa's only significant coal reserves; over 70% of Africa's coal reserves are found in South Africa (Snyman and Botha, 1993), with coal reserves of 30,408 million tonnes at the end of 2009, which represents 3.68% of the world's total coal production. Coal production in South Africa was valued at approximately ZAR 59.9 billion in 2009 (BP Statistical Energy Survey, 2010). South Africa is the world's sixth largest coal producer, and produced 4.3% of the world's coal in 2009 (247 million tonnes) (World Coal Association, 2011).**

**Conversely, South Africa is Africa's only significant coal consuming country, with a coal consumption of 99.43 million tonnes in 2009, which represents 3.3% of the world's total (Mbeni Information Services, 2011). In 2008, South Africa used coal for 93% of its electricity generation needs, and was the most dependent coal to electricity country in the world (World Coal Association, 2011). Apart from its domestic needs, South Africa is still the world's fifth largest coal exporting country, with exports in excess of 60 million tonnes of coal in 2009 (World Coal Association, 2011).**

**Coal plays a crucial role in the South African energy-economy and is fuelling local industry. The consumption of coal in South African coal-fired power stations will continue in the near future (Eberhard, 2010). Increased demand in Eastern countries (driven by rapid economic growth rates) will result in an increased demand for South African coal exports (Eberhard, 2010). As such, exports are expected to increase to 105 million tonnes per annum by the year 2020. This will increase the country's export earnings, which in turn will reduce the country's negative trade balance and current account deficit (Eberhard, 2010).**

**Both local and international markets are, at present, highly dependent on South Africa being a main provider of coal, now and in the future. The identification and exploitation of new coal reserves in South Africa is thus a prerequisite in meeting this demand.**

**The proposed Project is a key factor from a strategic point of view for Kangra Coal. Given that the current mining areas have**

**reserves sufficient to ensure mining can continue for approximately the next 3 to 5 years, this Project would extend the life of mine for approximately an additional 10 to 20 years - obviously this is dependent on market conditions and the outcomes of the feasibility project, which is currently underway. The proposed Project will also have an impact on the overall South African coal export figures, as the company plans to export approximately 1.6 Mtpa through the export trade seams.**

**From a social perspective, Kangra Coal constitutes one of the main sources of employment in the Dr. Pixley Kalsaka Seme and Mkhondo Local Municipalities. In an attempt to increase the skills and capabilities of current and potential employees, Kangra Coal maintains ongoing education and training programmes and economic contributions to development projects in surrounding communities.**

4.5. a description of the most appropriate procedure to plan and develop the proposed mining operation The applicant must:-

**See Section 4.5.1 and 4.5.2 below.**

4.5.1. Provide information on its response to the findings of the consultation process and the possible options to adjust the mining project proposal to avoid potential impacts identified in the consultation process.

**This will be an objective and outcome of the Impact Assessment phase of the Project.**

4.5.2. Describe accordingly the most appropriate procedure to plan and develop the proposed mining operation with due consideration of the issues raised in the consultation process.

**This will be an objective and outcome of the Impact Assessment phase of the Project.**

5. A description of the process of engagement of identified interested and affected parties, including their views and concerns

5.1. Provide a description of the information provided to the community, landowners, and interested and affected parties to inform them in sufficient detail of what the prospecting or mining operation will entail on the land, in order for them to assess what impact the prospecting will have on them or on the use of their land.

**As stated in Question 1.11 ERM is in the process of carrying out a public participation process (PPP) as part of the EIA. The objectives of the PPP are to:**

- **To ensure that stakeholders are well informed about the proposed development;**
- **To provide a broad set of stakeholders sufficient opportunity to engage and provide input and suggestions on the proposed expansion Project;**
- **To verify that stakeholder issues have been accurately recorded;**
- **To draw on local knowledge in the process of identifying environmental and social issues associated with the proposed Project, and to involve stakeholders in identifying ways in which these can be addressed; and**
- **To comply with the legal requirements.**

**In order to achieve these objectives, the PPP has been designed in three steps to provide information to the I&APs about all phases in the EIA:**

- **At pre-scoping phase - This phase, which has already been undertaken, involved targeted engagements with key stakeholders including representatives from the local municipalities (Mkhondo and Dr. Pixley Kalsaka Seme), relevant traditional authorities and landowners. These meetings served to introduce the proposed Project and the process to these key stakeholders and seek input into the design of the PPP for the ESIA. Awareness raising notification activities were also undertaken to invite members of the public to register an interest in the proposed Project; and**

- **At scoping phase - This phase, currently underway, officially initiates and notifies the public of the formal ESIA process. It provides further information on the proposed Project and the licensing processes and gives Interested and Affected Parties (I&APs) the opportunity to raise issues of concern, suggestions and comments about the proposed Project, the draft Scoping Report and the draft Terms of Reference for the ESIA studies to be undertaken in the impact assessment phase.**

- **At Impact Assessment Phase - This phase will allow I&APs to comment on findings of the specialist assessments of anticipated impacts as well as in the development of appropriate mitigation measures.**

**To date public participation activities associated the pre-scoping phase have been undertaken. This involved the following activities:**

- 1. Distribution of proposed Project announcement letter and Background Information Document (BID) (refer to Annex C). The BID and announcement documentation emailed and posted to stakeholders.**

- 2. Placing of adverts. Adverts were placed in the Excelsior (5 August 2011) and Recorder (5 August 2011) newspapers as well as the municipal circulars (Vuka Pixley Kalsaka Seme and Mkhondo News) (refer to Annex C).**

- 3. Putting up of site notices. Site notices were put up at local libraries, post offices, municipal offices and frequently visited shops or taxi ranks in Volksrust, Wakkerstroom, Dirkiesdorp, Piet Retief, Driefontein and Daggakraal (refer to Annex C).**

- 4. Identification of stakeholders. Stakeholder database which includes interested and affected parties from various sectors of society including directly affected landowners in and around the proposed Project area (refer to Annex D).**

- 5. Meetings with relevant stakeholders. Meetings with local authorities, appropriate traditional authorities and potentially directly affected landowners in mid July 2011. Introduction of the proposed Project and its processes (refer to Annex E).**

- 6. Obtained comments from stakeholders. Comments, issues of concern and suggestions received from stakeholders are**

**captured in the Comment and Response Report. These interim comments and responses are appended to Annex F.**

**A Draft Scoping Report developed under the requirements of the NEMA will be made available to registered I&APs for a 60 day comment period and placed at the following public places within the proposed Project are:**

- **Volksrust Public Library and Post Office;**
- **Wakkerstroom Library and Post Office;**
- **Piet Retief Library and Post Office;**
- **Driefontein Post Office & Thusong Service Centre;**
- **Daggakraal Clinic; and**
- **Dirkiesdorp Clinic.**

**During the 60 day comment period a public meeting, open house and focus group meetings will be held with various stakeholders. All comments, issues of concern and suggestions received from stakeholders will be captured in the comment and response report.**

**Public participation during the impact assessment phase of the EIA will revolve around a review of the findings of the EIA, presented in the Draft EIA Report, and the volume of Specialist Studies. These reports will be made available for public comment during the first quarter of 2013.**

**I&APs will be advised timeously of the availability of these reports, of how to obtain them, and of the date and venue of the meetings where the content of the reports will be presented for comment. They will be encouraged to comment either in writing (mail or email), by attending the stakeholder meetings or by telephone. Ample notification of due dates will be provided.**

**As with the scoping phase, similar activities will be undertaken to ensure that stakeholders are given the opportunity to comment on the Draft EIA Report and associated Environmental Management Programme (EMP). It is anticipated that this phase of activity will commence in the first quarter of 2013.**

5.2. Provide a list of which of the identified communities, landowners, lawful occupiers, and other interested and affected parties were in fact consulted.

**All stakeholders that were identified, registered for the proposed Project, provided with information and/or consulted are included in the stakeholder database (see Annex D). The database is categorised in order to differentiate between the various stakeholder groups which include:**

- **Landowners;**
- **Directly Affected Stakeholders;**
- **Local Government;**
- **Provincial Government;**
- **National Government;**
- **Parastatals;**
- **Traditional Authorities;**
- **Community Based Organisations;**
- **NGOs;**
- **Unions;**
- **Institutes; and**
- **General.**

5.3. Provide a list of their views in regard to the existing cultural, socio-economic or biophysical environment, as the case may be,

**All stakeholder comments are captured in the Comment and Response Report (see Annex F) which has been categorised into appropriate sections distinguishing socio-economic and biophysical environment comments.**

**A summary of stakeholder comments include the following:**

- **Proposed Project Specific - Question on the distance from the existing mine to the proposed mine. In addition whether mining activities would continue at the existing mine.**

**Request for more information on mining aspects including the type of coal to be mined, depth and thickness of layers to be mined.**

- **Environmental Impact - The area is a very sensitive environment with key wetland areas and significant birdlife (also from a national perspective).**



**Large portions of the proposed project fall within catchment areas classified as “irreplaceable” and “highly significant” in terms of the Mpumalanga Biodiversity Conservation Plan (MBCP). These catchments form the headwaters of the Usutu river system and the intended operations would impact on the Hlelo and Assagai rivers (both of which are tributaries to the Usutu River).**

- **Groundwater and Water Quality - Concerns were raised over the impact the proposed project would have on water in the area in the long run in particular once coal had been removed.**

**It was noted that the holes drilled during prospecting by Kangra Coal and their contractors were not filled immediately.**

**Request to have access to the detailed hydrology report (where the impact on each spring needs to be assessed) and water specialist reports.**

**Common concerns that would need to be considered included the impact on water resources.**

- **Socio-economic and Community - Question as to how this proposed project will benefit their community, not only from an employment perspective but also in terms of sustainable development and investment in the area.**

**Question on the number of people that would have to move as a result of the proposed project.**

**Request for meaningful jobs to be created as a result of the proposed project.**

**Raised the importance of ensuring sustainable benefits to the community for the long term (including unborn generations).**

- **Air Quality - Common concerns identified that would need to be considered included NO<sub>x</sub> and SO<sub>x</sub> emissions.**

**Raised concern over the release of harmful fumes as well as odours that may emanate from proposed project activities.**

- **Building and Infrastructure - Raised the concern that the underground mine will cause cracks in their aboveground structures. This was raised in the context of suggestions that these stakeholders would not need to relocate where underground mining was taking place.**

5.4. Provide a list of their views raised on how their existing cultural, socio-economic or biophysical environment potentially will be impacted on by the proposed prospecting or mining operation;

**Refer to Section 5.3 above.**

5.5. Provide a list of any other concerns raised by the aforesaid parties.

**Refer to Section 5.3 above.**

5.6. Provide the applicable minutes and records of the consultations.

**All stakeholder meeting minutes are appended in Annex E.**

5.7. Provide information with regard to any objections received.

**Concerns associated with hydrology, geohydrology and biodiversity have been raised (refer to Annex F for the Comment and Response Report). No formal objections from stakeholders have yet been received.**

6. Describe the nature and extent of further investigations required in the environmental impact assessment report, including any specialist reports that may be required.

**In summary, the following potential negative impacts associated with the proposed expansion Project are deemed to be the most significant:**

- **The potential loss of suitable land for agriculture;**
- **The potential contamination of surface hydrological features in and around the Project area;**
- **Impacts associated with groundwater drawdown on local boreholes, springs and wetlands;**
- **The potential for Acid Mine Drainage (especially for Adit A) resulting in contamination of groundwater and subsequent impact on groundwater fed streams and wetlands and groundwater users;**

- **An increase in noise levels to a number of sensitive receptors (including fauna);**
- **The potential for airborne emissions (mainly particulates) from the proposed Project impacting on sensitive receptors;**
- **The potential for a visual impact to rural villages, residential areas and farmsteads to the west of the Mantshangwe Mountains.**
- **The potential to impact on both the terrestrial and aquatic (including wetlands) ecology of the area.**
- **The potential to impact on a number of informal households and commercial landowners in the area, that may need to be compensated and/or relocated from the proposed Adit construction footprint; and**
- **The potential to impact on identified cultural heritage resources (and in particular graves) in the area, as they will have to either be avoided or relocated.**

**In addition to the above, the following positive potential impacts have been identified for the Project; to enhance such positive impacts, these aspects will also be addressed through detailed Terms of Reference for specialist studies, presented in Chapter 10:**

- **Continued revenue to the affected District and Local Municipalities;**
- **Continuation (and the potential creation) of employment opportunities for the local communities;**
- **A continuation (and potential increase) in financial benefits for local businesses and vendors; and**
- **Community and infrastructure development within the Wards affected by the Project.**

**Specialist involvement in the Impact Assessment Phase to assess the above mentioned impacts include the following:**

#### **1. Soil and Landuse Capability Specialist**

**A soil survey to determine the soil's agricultural and/or rehabilitation potential will be undertaken during the impact assessment phase. The survey will take place only in those areas where surface infrastructure will be constructed (such as the ventilation Adit, haul roads, conveyor belt routes, discard dump**

etc.). This information will be used to inform the EIA and any management measures proposed.

## **2. Hydrology Specialist**

The proposed Project is situated in the upper reaches of the Hlelo River. Surface water from this source will not be used by the proposed Project.

Hydrological specialist input into the EIA phase will therefore include:

- **The identification of potentially impacted rivers and streams;**
- **Baseline surface water quality and the design of a surface water quality monitoring programme;**
- **The determination of normal dry weather flows;**
- **The determination of flood peaks and volumes (for affected rivers and streams) as per SANRAL's Drainage Manual;**
- **The determination and mapping of flood lines (flood widths) for major streams using HecRas, in conjunction with River Cad. (Calculation of floodlines will be limited to those streams estimated to have flood widths wider than the "nominal" prescribed 64 metres); and**
- **The incorporation of this information into a comprehensive Water Management and Monitoring Plan for the Project, incorporating those findings from the hydrogeological study, as described below.**

## **3. Hydrogeology Specialist**

Comprehensive sets of data have been collected during baseline groundwater studies in the Project area. Data has been collected through:

- **Geophysical Surveys and on-site drilling;**
- **Aquifer Testing of drilled boreholes;**
- **Geochemical Assessment of Hydro-geochemical samples and borehole core samples, drilled in the respective mining blocks; and**
- **Data from a Comprehensive Hydrocensus and Selective Water Sampling.**

**Existing Kangra Coal Mine information as well as the results from the intrusive studies and hydrocensus will be used to characterise the groundwater regime and to construct a groundwater conceptual model of the baseline groundwater conditions.**

**The conceptual site model will describe the following:**

- **The type of aquifer/s present and its relationship with the surface topography;**
- **Depth to the aquifer and aquifer parameters such as transmissivities and storability;**
- **Borehole yields;**
- **Description of the groundwater chemistry;**
- **Geochemical leach characteristics of coal, discard and spoils;**
- **Groundwater use within the study area;**
- **Subsurface extent and thickness of aquifers and confining units (hydrogeological framework);**
- **Groundwater flow direction;**
- **Natural groundwater flow boundaries (also referred to as boundary conditions), which control the rate and direction of movement of groundwater;**
- **Yields and hydraulic properties of the aquifers;**
- **Estimation of groundwater recharge;**
- **Seasonal variations of the above stresses; and**
- **Aquifer classification and vulnerability.**

**A numerical groundwater model will be constructed, based on the conceptual site model, to include a complete steady state model as well as a transient state model for the construction and operational phase and up to 100 years post mine closure.**

**The model should be used to evaluate:**

- **Mine dewatering and resultant groundwater drawdown cones;**
- **Existing and future groundwater contaminant plumes from plant and mine waste areas; and**

- **Potential mine decant.**

**The results of the numerical modelling exercise will be used to make informed management decisions regarding to all phases of the mine life cycle, and will be incorporated into a detailed Water Management and Monitoring Plan.**

#### **4. Noise Specialist**

**As part of the Noise Impact Assessment, more detailed information for each phase of the Project, relating to mining infrastructure, day time and night time operations and associated mining equipment will be sourced and used as input data into a noise model (using the SANS stipulated methodology).**

**The noise impact assessment will be done as per the SANS 10328:2003 standard. The calculated level of operational noise LAeq,d will be compared against the measured background noise levels, the zone sound levels as well as the change in noise levels to determine the impact on the surrounding environment, focusing on identified potential sensitive receptors.**

**Should noise levels exceed the set zone sound levels, mitigation will be proposed and where possible, modelled (barriers and/or enclosure), allowing a visual and definitive estimation of projected future noise levels. All data will be presented on aerial images using contours of constant noise levels. The standards to evaluate the environmental impact used will be SANS 0328:2003.**

#### **5. Air Quality Specialist**

**The Air Quality Impact Assessment will involve the following:**

- **Compilation of an emissions inventory, comprising the identification and quantification of potential routine and upset sources of emissions;**

- **Dispersion simulations of ambient inhalable particulate concentrations and dust fallout from the mining and transport activities for the following scenarios (the detail of which will be dependent on available engineering design information):**

- o **Construction Phase: Highest daily PM10 concentrations and total daily dust deposition due to routine emissions from infrastructure creation and road construction; and**

**o Operational Phase: Gaseous and particulate concentrations due to routine and upset emissions.**

**• Analysis of dispersion modelling results, including:**

**o Assessment of the predicted incremental ground level concentrations;**

**o Assessment of the predicted cumulative ground level concentrations;**

**o Evaluation of potential for human health and environmental impacts; and**

**o Recommendation of emission controls and management measures to be taken into account in the Project design phase in order to minimise the potential for air quality impacts.**

**• Mitigation for unacceptable environmental impacts.**

**The modelling scope includes the dispersion of air pollutants arising from all potential sources at the proposed mining operations (e.g. particulates due to wind erosion, materials handling, materials preparation and road dust). Given the Project background, most of the emissions would be ill-defined, such as wheel entrainment or windblown dust from exposed areas and conveyor belts. Emissions from the Adits will therefore need to be estimated and point source emissions included in the predictions. Where applicable, air quality data from existing operations will be used in model simulations.**

**The most readily available emission factors are those published by the United States Environmental Protection Agency. However, local experience in previous monitoring campaigns may be utilised to estimate emission rates for, for example, vehicle traffic on paved and unpaved roads, emissions from outdoor stockpiles, dust emissions generated by wind erosion of exposed areas, and other sources of fugitive emissions from crushing, screening; and conveying.**

**Ground level concentrations of particulates for all these sources and various scenarios will be performed by employing a suitable atmospheric dispersion model. The model selection will need to be based on the complexity of the terrain and the availability of detailed meteorological data. The AERMOD and CALPUFF models require upper air data, which is not always readily available. Since**

**the emissions are mainly generated at ground level, it is anticipated that either the ADMS or AERMOD models will be used.**

## **6. Visual Specialist**

**The Visual Impact Assessment will involve the following key steps:**

- Determine visual intrusion - Photographs taken during the site visit will be digitally manipulated to simulate the physical presence and nature of the visual intrusion of the proposed project components from critical viewing areas. These simulations will model the Project, within the landscape context and would illustrate the ability/inability of the landscape to absorb the 'intrusion'.**
- Determine visibility and visual exposure - Visibility is determined by conducting a view shed analysis. A semi-quantitative digital terrain model (DTM) which consists of features that normally occur on 1:50 000 maps, such as roads and settlements, will be "draped" over contours (derived from 1:50 000 maps) to generate an analysis that determines all potential observation sites (the view shed) from which Project components would be visible.**
- Describe the visual resource - Landscape character, landscape quality and sense of place will be used to determine the visual resource. These measures are intrinsic to the landscape and thus they enable a value to be placed on the landscape that is independent of the person doing the viewing.**
- Environmental impact assessment - The overall environmental impact will be assessed using the ERM impact rating system.**
- Mitigation measures and environmental management plan - Detailed mitigation measures to reduce the visual impact and the impact on the sense of place will be proposed. The effectiveness of mitigation will be evaluated. An indication of methods for implementation, timeframes, costs and responsibilities will be given. This information will be fed into the EMP.**

## **7. Biological Specialist**

### **Flora**

**In addition to an initial desktop review already undertaken, a detailed summer (November 2010 to March 2011) field investigation was undertaken, giving special attention to any areas of potential**



**conservation importance; for example ridges, river/wetland systems etc.**

**Results from the field sampling exercise undertaken will include:**

- **The identification and mapping of individual habitats and vegetation communities;**
- **A description of the vegetation communities (structure, dominant plant composition and condition);**
- **Listing the Red Data / Conservation Important species that could occur on site. If any species are located, their GPS readings will be noted and mapped; and**
- **Ranking of each habitat type based on conservation importance (in terms of provincial biodiversity priorities) and ecological sensitivity.**

**Fauna (including avi-fauna)**

**In addition to an initial desktop review already undertaken, a five day detailed summer (November 2010 to March 2011) field investigation was undertaken. Recording of faunal species involved both visual observations (including night investigations) and the laying of live-traps. Trapping sites included small mammal, insect and herpetofaunal trapping. An array trap, consisting of three lines, each consisting of plastic drift fences, with pitfall traps at the end of each line, with a pitfall at the centre of the array will be used.**

**Bird data was collected by means of point counts placed within each homogenous area or habitat type. Data from the point counts was then analysed to determine typical or dominant species. Birds were identified and, where necessary, verified using Roberts Birds of Southern Africa, VIIth ed. (Hockey et al., 2005). Birds were also identified by means of their calls and other signs such as nests, discarded egg shells (Tarboton, 2001) and feathers. Particular attention was paid to suitable roosting, foraging and nesting habitat for Red Data species. The occurrence of cryptic or elusive Red Data species was verified by playback of their respective calls.**

**Results from the field sampling exercise undertaken will include:**

- **Faunal species linked to each habitat type identified in the floral assessment;**

- **A full list of bird species observed and expected to occur will be provided, including habitat preferences;**
- **A list of the Red Data / Conservation Important species that could occur on site; and**
- **Identification of areas of conservation importance based on the species and habitats identified.**

#### **Aquatic Assessment**

**The aquatic assessment study will be undertaken in accordance with the Department of Water Affairs's (DWA) Section 21 (i) and (c) supplementary water use license requirements. This requires that the PES of the habitat, water quality, aquatic macro-invertebrates and fish assemblages must be assessed.**

**The assessment will follow DWA approved River Health Programme (RHP) methodologies at four sites, two in the Hlelo River and two in a first order tributary of the Mpundu River.**

**A baseline assessment of the riparian and in-stream habitat involved:**

- **Fluvial geomorphology: a brief baseline description of the fluvial geomorphology will be done, based on the RHP site characterisation field manual by Dallas (2005);**
- **Vegetation: a description of the riparian vegetation zones and species composition will be conducted; and**
- **Habitat Integrity: Impacts on habitat will be evaluated using the Index of Habitat Integrity (IHI) derived by Kleynhans (1999) and the habitat availability will be assessed using the RHP site characterisation field manual by Dallas (2005).**

**A baseline assessment of the water quality involved both in-situ water quality testing and collection of water samples for analysis in a laboratory.**

**A baseline assessment of the biota involved:**

- **Aquatic macro-invertebrate assemblage assessment: Aquatic macroinvertebrate sampling will be conducted using the South African Scoring System version 5 (SASS5) methodologies, according to Dickens and Graham (2002), as well as the Macro-invertebrate**

**Response Assessment Index (MIRAI) methodology (Thirion, 2007); and**

- **Fish assemblage assessment: Sampling will be undertaken using standardised methodologies as per the Fish Response Assessment Index (FRAI), (Kleynhans, 2007). The data collected will be used to determine the PES for the fish assemblage in accordance with FRAI as well as the conservation status of species present.**

**A detailed baseline report will be compiled stipulating the current ecological status, which will include results on baseline conditions including:**

- **PES based on the macro-invertebrate and fish responses as well as the water quality and habitat indicators will be discussed and the results mapped and visually represented;**
- **Highlight presence of aquatic fish species of conservation significance as well as exotic faunal and floral species present;**
- **Incorporation/comparison of reference and historical data with the current data obtained in this study;**
- **The PES of the major wetland systems;**
- **The Eco-services provided by the identified wetlands; and**
- **Identification of present and impacts on the aquatic and wetland ecosystems.**

**Baseline data collected will be used to inform the impact assessment, and where appropriate, detailed mitigation measures will be included in the EMP.**

### **Wetland Delineation**

**During the baseline assessment, potential wetland systems were identified within the proposed project footprint. As such, wetland delineations will be undertaken within the proposed Project area. This will be carried out in accordance with the Department of Water Affairs Guideline “A practical field procedure for identification and delineation of wetlands and riparian areas” (DWAF, 2005).**

**In addition to wetland delineation, the following will be applied to identified wetlands:**

- **The assessed wetlands will be classified based on its hydro-geomorphic (HGM) unit. This method focuses on the HGM determinants of wetlands and incorporates geomorphology; water movement into, through and out of the wetland; and landscape / topographic setting.**
- **A functional assessment of the assessed wetlands, using the WET-EcoServices technique will be applied to reveal the ecosystem services supplied by each wetland.**
- **The Present Ecological State of each wetland will be assessed.**

**Based on this information collected, the potential impacts to wetlands will be assessed and, if possible, practical and implementable mitigation measures will be provided.**

## **8. Social Specialist**

### **Social**

**The following information will be collected as part of the social baseline study:**

- **Administrative and leadership structures including community forums and networks;**
- **Socio-political factors;**
- **Land uses and tenure arrangements;**
- **Demographics (e.g., total population, age, gender, ethnicity, language, religion, household size and structure);**
- **In- and out-migration;**
- **Levels of education, skills and education facilities;**
- **Levels of ( and access to) water and sanitation;**
- **Levels of ( and access to) transport infrastructure and services;**
- **Levels of ( and access to) power infrastructure/ sources;**
- **Levels of ( and access to) waste management infrastructure and services;**
- **Levels of ( and access to) communication infrastructure;**

- **Levels of ( and access to) social, recreational (and tourism) facilities;**
- **Cultural practices/sensitivities e.g., traditional medicine, sacred sites, graves; and**
- **Human rights, safety and security.**

### **Economic**

**The following information will be collected as part of the socio-economic baseline study:**

- **Current economic and livelihood activities (e.g., farming, tourism, commercial, and other industries) specifying the nature, extent and capacity of these activities;**
- **Future economic and strategic development plans;**
- **Workforce, levels of employment (formal, informal and subsistence), unemployment and underemployment;**
- **Income and expenditure (including rates and taxes);**
- **Levels of poverty and distribution of wealth; and**
- **Savings/investment culture and access to micro-finance/banking institutions.**

**In addition to the above, a full and detailed understanding of Kangra Coal's Social and Labour Plan (SLP) commitments which are to be incorporated into community upliftment planning initiatives, will be obtained.**

**Following the data collection activities, impacts will be identified that are associated with the construction, operation and closure phase activities of the proposed Project. The identification of potential positive and negative impacts will be informed by the stakeholder engagement process (primary data collection), the baseline study and the public consultation process.**

**Management and mitigation measures to address the identified impacts will be recommended and drafted. These measures will be formulated to maximise the positive impacts and reduce the extent of the negative impacts.**

**It is assumed that the mine's SLP has identified strategies and programmes to address employment, local economic**

**development, and management of mine closure. The SLP will be reviewed to identify current/ future alignment to mitigation measures proposed within the Social Impact Assessment.**

#### **9. Cultural Heritage Specialist**

**The Heritage Impact Assessment (HIA) will involve a thorough and focused assessment of mitigation and heritage impacts of the proposed Project infrastructure, including the identification of appropriate management actions. The HIA will fulfill all the requirements of Section 38 (3) of the National Heritage Resources Act, 1999 (NHRA), namely the identification and mapping of heritage resources and the assessment of the significance thereof, an assessment of the positive and negative impacts of the proposed Project, the results of consultation with Interested and Affected Parties (I&APs), the consideration of alternatives, and plans for the mitigation of any adverse impacts.**

**The heritage component of the full EIA report will be submitted to the relevant heritage authority for comment (and approval) before a Record of Decision (RoD) is issued.**

#### **B. IDENTIFICATION OF THE REPORT**

The report on the results of consultation must, at the end of the report include a certificate of identification as follows;

<b>Herewith I, the person whose name and identity number is stated below, confirm that I am the person authorised to act as representative of the applicant in terms of the resolution submitted with the application, and confirm that the above report comprises the results of consultation as contemplated in Section 16 (4) (b) or 27 (5) (b) of the Act, as the case may be.</b>	
<b>Full Names and Surname</b>	<b>Michael John Everett</b>
<b>Identity Number</b>	<b>6512135015087</b>

**- END -**

Annex A

Tables

**Table.1** *List of Landowners*

Property	Surveyor 21 Digit Code	Title Deed Number	Infrastructure Development Footprint (m <sup>2</sup> )	Name	Contact Number
<b>Adit A</b>					
Donkerhoek No. 14-HT, Portion 4	T0HT0000000001400004	T102893/2005	81, 653	C.J.F. Greyling	082 773 2310 / 017 730 0375
Twyfelhoek No.379-IT, Portion 3	T0IT00000000037900003	T53617/1998	92, 047 (incl. 10, 200 on adjacent side of D2548 road for water storage)	Yende Community	072 155 0434
Twyfelhoek No.379-IT, Portion 2	T0IT00000000037900002	T53617/1998	11, 009	Yende Community	072 155 0434
<b>Adit B</b>					
Blinkwater No.34-HT, Portion Remainder	T0HT0000000003400000	T002752/2011	±2 8, 600	Kanluka Community	072 554 9897
<b>Conveyor Route</b>					
Twyfelhoek No.379-IT, Portion 2	T0IT00000000037900002	T53617/1998	53, 474	Yende Community	072 155 0434
Twyfelhoek No.379-IT, Remainder	T0IT00000000037900000	T53617/1998	42, 009	Thuthukani	076 997 4895
Nooitgezien No. 381-IT, Remainder	T0IT00000000038100000	T36896/2006	82, 718	Kangra Coal	N/A
Rooikop No. 18-HT, Portion 1	T0HT0000000001800001	T1131/2004	13, 424	Kangra Coal	N/A
Rooikop No. 18-HT, Remainder	T0HT0000000001800000	T78816/2004	32, 712	Kangra Coal	N/A
<b>Contractors Camp During Construction (Temporary)</b>					
Rooikop 18HT, Portion 1	T0HT0000000001800001	T1131/2004	30, 000	Kangra Coal	N/A



**Table.2** *Details of Quaternary Catchment Area*

Adit	QUATERNARY CATCHMENT	TOTAL AREA (km <sup>2</sup> )	MEAN ANNUAL PRECIPITATION (mm)	MEAN ANNUAL EVAPORATION (mm)	MEAN ANNUAL RUNOFF (mm)
A	W52A	289	836	1 400	107
B	W51B	496	864	1 400	90

**Table.3** *Infrastructure Locations*

Infrastructure	Latitude	Longitude
Adit A (Main Mine Adit)	27° 01' 01.38" S	30° 17' 08.88" E
Adit B (Ventilation)	27° 3' 33.7" S	30° 18' 42.8" E
Overland Conveyor Route	27° 00' 55.64" S	30° 17' 15.07" E (start pt.)
	27° 00' 34.54" S	30° 18' 12.86" E
	27° 00' 08.84" S	30° 18' 59.86" E
	27° 00' 37.88" S	30° 21' 04.45" E
	27° 00' 38.02" S	30° 21' 24.09" E (end pt.)
Proposed contractor camp (temporary)	26° 59' 44.29" S	30° 20' 30.15" E

Annex B

## Figures





*Figure 3*

*Graveyard Dating from the Historical Period and from the More Recent Past on the Farm Maquasa 19HT outside the Project Area*



*Figure 4*

*Graveyard Possessing Graves of a Variety of Ages approximately 35m from the South Eastern Perimeter of Adit A*





*Figure 5 Remains of Two Kinds of Homesteads in the Larger Project Area which have Historical Affinities as Both are Older than Sixty Years*



*Figure 6 A Single Grave Near a Homestead in the Vicinity of Proposed Adit A*



*Figure 7 Sandstone Bank or Reef*



*Figure 8 A Colonial Graveyard Demarcated with Dolerite Walls on Beelzebub 13HT, outside of Proposed Adit C*



*Figure 9 Stone Wall Enclosures near the Proposed Project Area*





Figure 10 Hydrological Locality Map Illustrating Catchment Areas

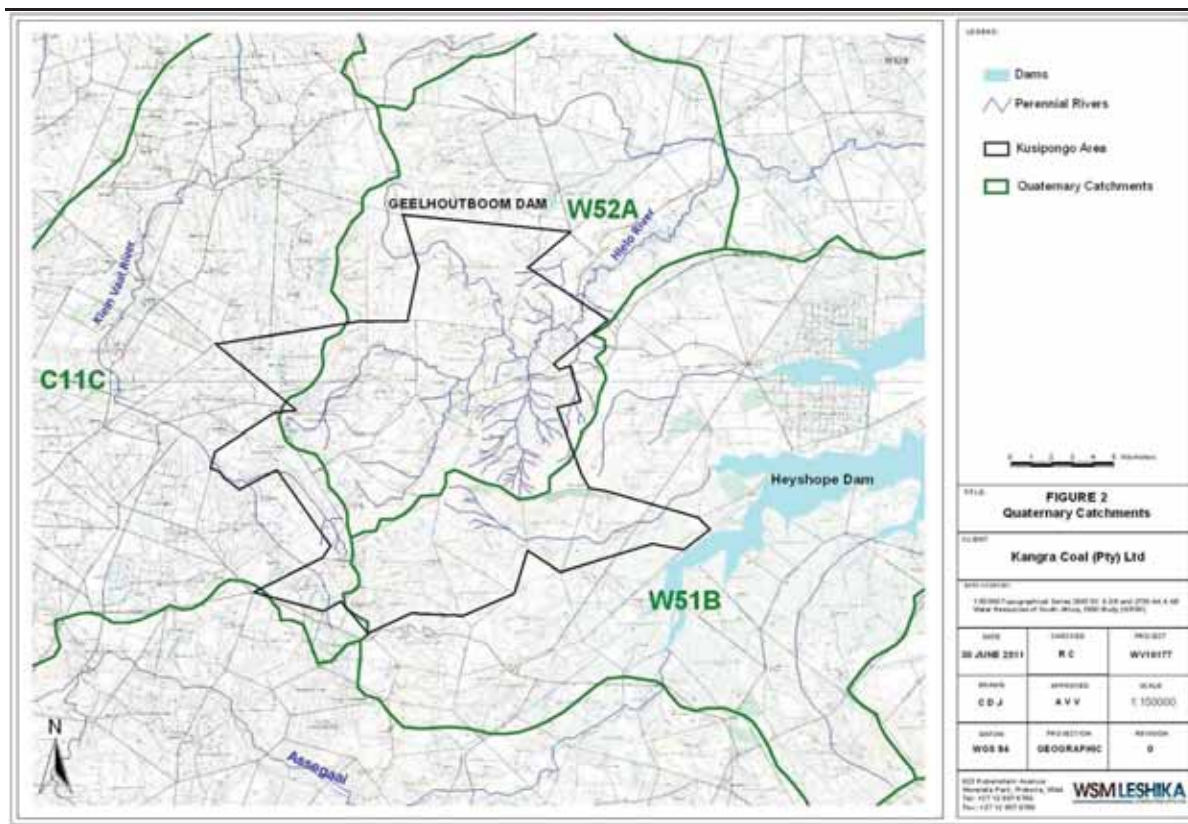


Figure 11 Location of Mine Site Infrastructure

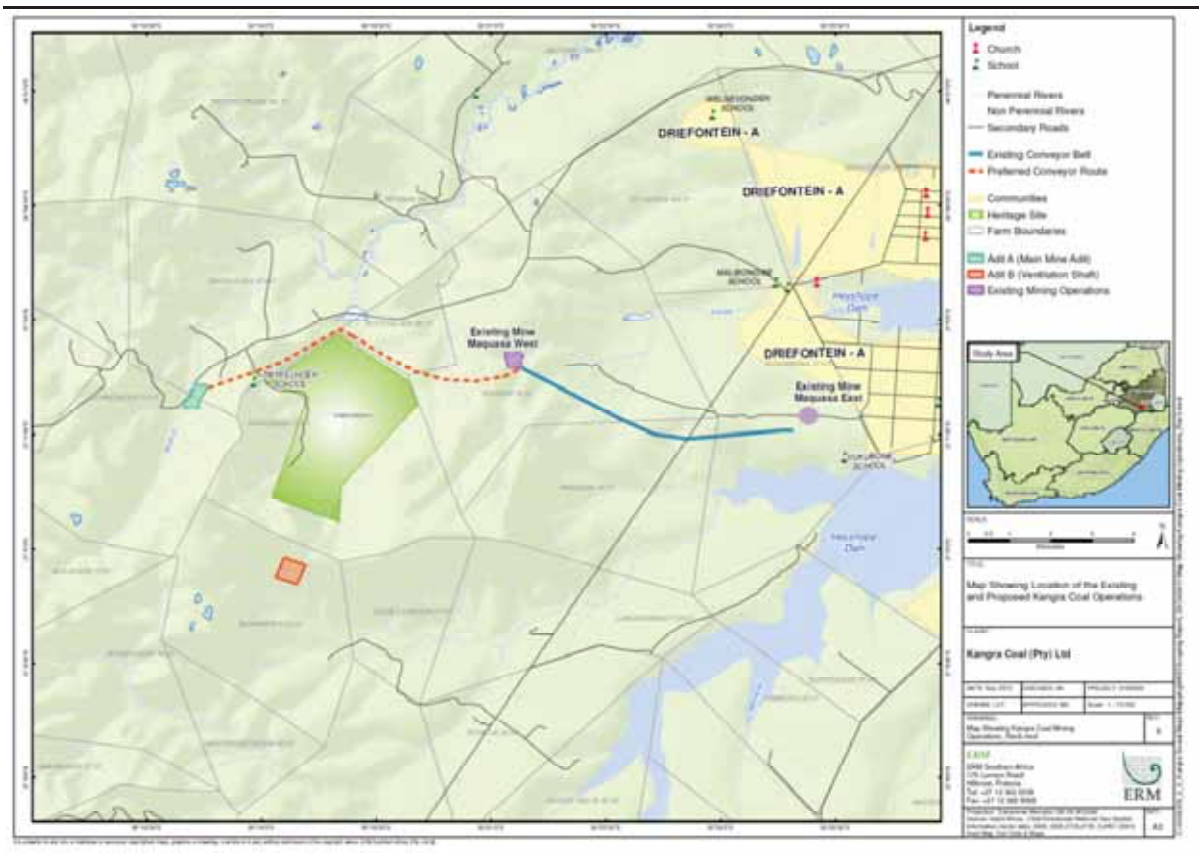


Figure 12 Site Layout for the Proposed Main Mine Adit (Adit A)

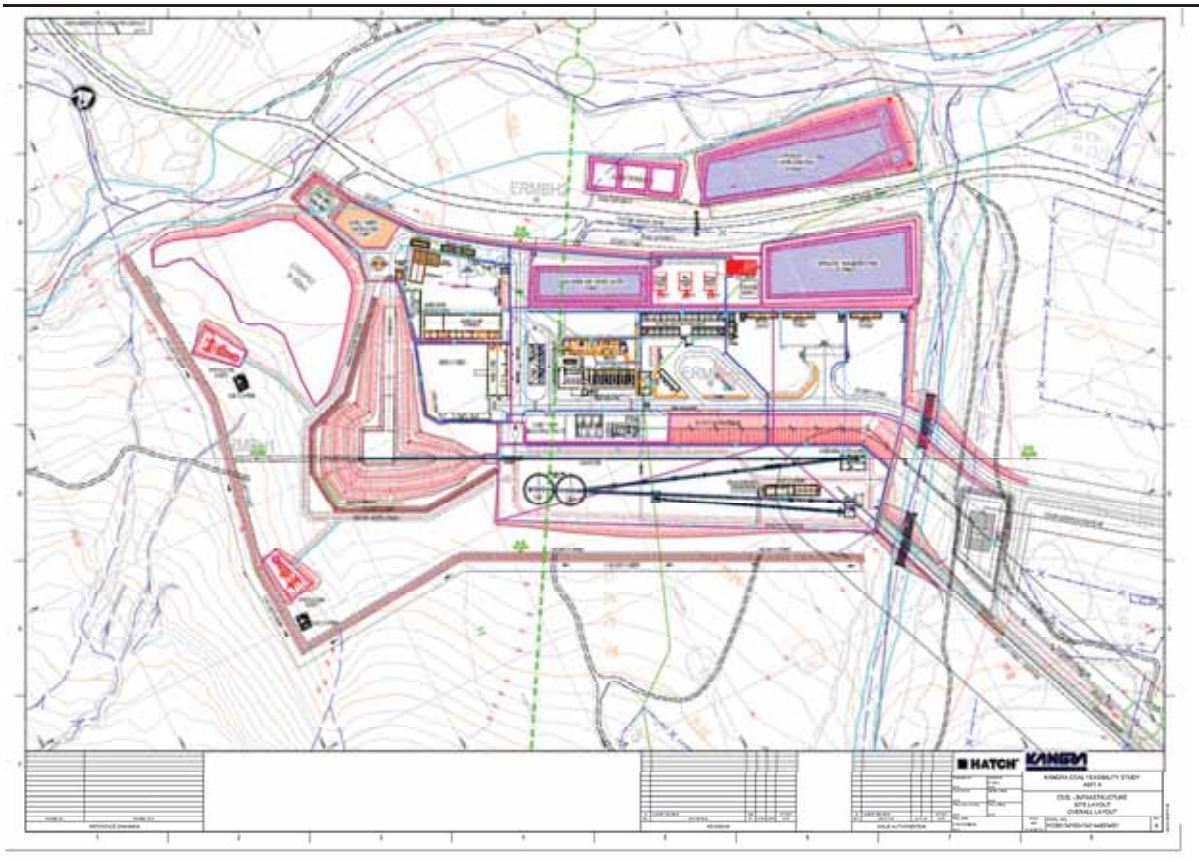
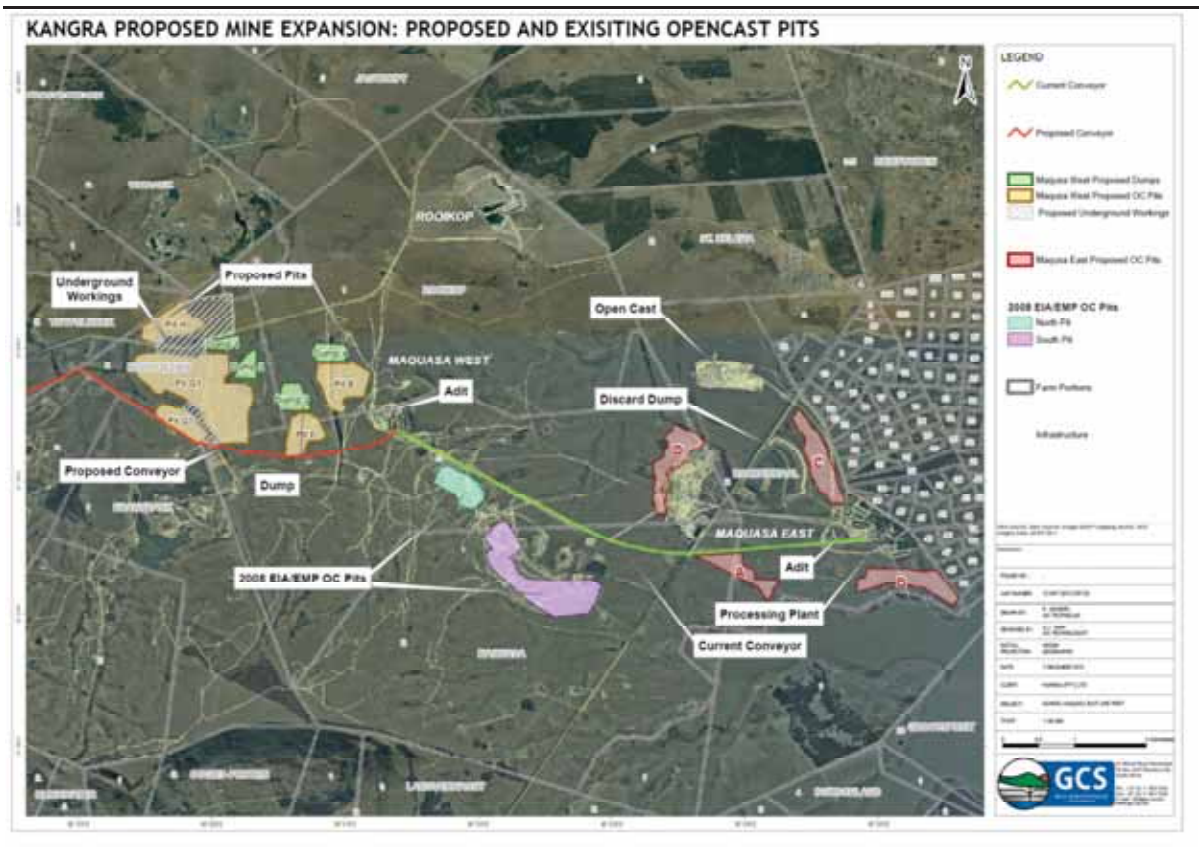


Figure 13 Proposed Mine Expansion Projects at Maquasa



Annex C

## Pre Scoping Public Participation Materials

Annex C1

## Background Information Document (BID)

- *C1.1 – English BID*
- *C.1.2 – Afrikaans BID*
- *C1.3 – Zulu BID*

Annex C1.1

English BID





## Background Information Document and Invitation to Comment

### Proposed Kangra Coal Kusipongo Expansion Project



#### Aim of this Document

The aim of this Background Information Document is to provide stakeholders with information about the proposed expansion of Kangra Coal's Kusipongo Coal mining operation and the associated Environmental and Social Impact Assessment (ESIA) and permitting processes. It also calls for all stakeholders to register as Interested and Affected Parties.

The project is subject to several authorisation and licensing processes, including an EIA in accordance with the requirements of the EIA Regulations of 18 June 2010 under the National Environmental Management Act (NEMA) (Act 107 of 1998), as amended, a mining rights application process in accordance with the Mineral and Petroleum Resources Act 28 of 2002 (MPRDA), as well as other processes associated with environmental legislation including the National Water Act and the National Environmental Management: Waste Act.

The authorising authorities for the respective authorisation and

licensing processes will be Mpumalanga Department of Economic Development, Tourism and Environment, the National Department of Environmental Affairs, the Department of Water Affairs and the Department of Mineral Resources.

These processes require that a public participation process be undertaken. Interested and Affected Party (I&AP) stakeholders will have the opportunity to register (RI&APs) and be part of the process and raise issues and concerns that they may have.

To ensure you are fully informed and receive all necessary information please register by contacting Nomsa Fulbrook-Bhembe of ERM by 26 August 2011.

Tel: 011 798 4300

Fax: 011 804 2899

Email: [nomsa.fulbrook-bhembe@erm.com](mailto:nomsa.fulbrook-bhembe@erm.com)

Postal address: Postnet Suite 90, Private Bag X12, Tokai, 7966

#### Project Description

Kangra Coal (Pty) Ltd proposes to expand their current mining operations facility at the Savmore Colliery, near Piet Retief in Mpumalanga. The Savmore Colliery currently operates on the Maquasa East, West and West Extension mining rights. Current operations entail both underground and open pit mining methods.

The proposed expansion project involves an underground mine at the Kusipongo Resource, located approximately 15 km west of Driefontein, spanning across the Mkhondo and Dr Pixley Kalsaka Seme Municipalities. The anticipated run-of-mine (ROM) production volume is expected to be 5 Mtpa, with the majority of product being exported for use as thermal coal. The proposed mine is estimated to have a lifespan of approximately 30 years.

#### Project Scope

The scope of the proposed project involves the development and construction of:

- An underground mine at Site X shown on the map overleaf;
- A large Adit\* facility at Site A;
- Two smaller sites with vertical ventilation shafts at Adits\* B and D;
- An overland conveyor for the transport of coal;
- Upgrade of the existing access roads; and
- Electricity distribution infrastructure.

These are described further overleaf.

*\*An Adit is a passage (vertical or horizontal) from the surface to the underground mine*

#### Project Location

The proposed Adit A is located on the following farms:

- Twyfelhoek 379 (Portion 2 and 3);
- Donkerhoek 14 (Portion 4)

The proposed Adit B is located on farms:

- Kransbank 15 (Portion 2 and Remainder)

The proposed Adit D is located on farms:

- Donkerhoek 14 (Portion 22 and Remainder of Portion 2)

The proposed overland conveyor is located on farms:

- Twyfelhoek 379 (Portion 2 and Remainder);
- Rooikop 18 (Portion 1 and Remainder); and
- Nootgezien 381 (Remainder)

#### WHO IS KANGRA COAL?

Kangra Coal was incorporated as Zinan Property Holdings in 2001, and the name was changed to Kangra Coal (Pty) Ltd in 2003. Kangra Coal is based in Piet Retief, South Africa.

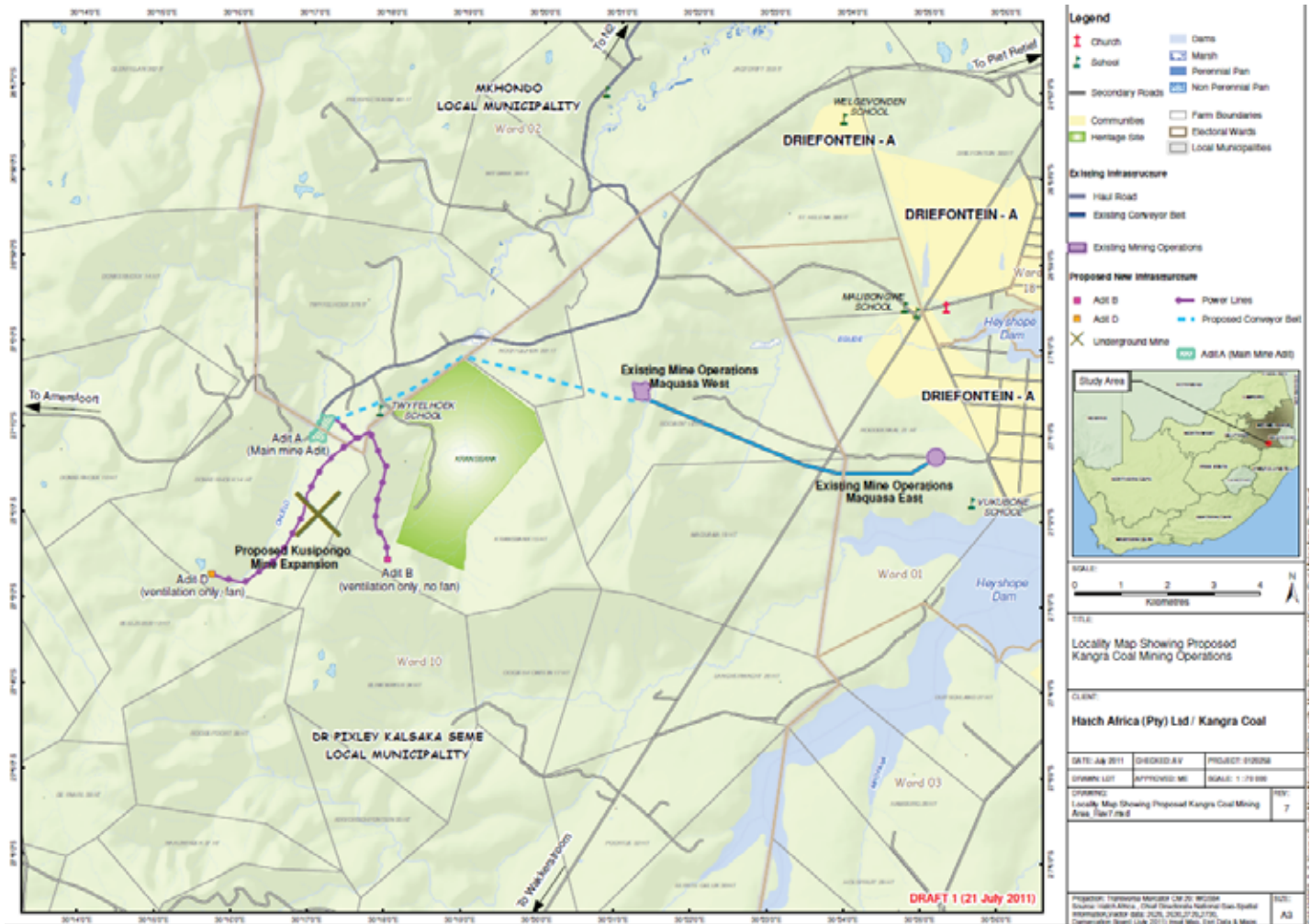
Kangra Coal was previously a privately owned business. In 2004 the South African investment company Shanduka Coal Investments (Pty) Ltd entered into the company. During 2007 the Spanish utility Union Fenosa (now Gas Natural Fenosa) acquired the majority stake, with Kangra Coal becoming a subsidiary of Union Fenosa. S.A Kangra Coal has three main strands to its business: it exports coal through trade contacts, it supplies the domestic market and it also exports to India. Clients are predominantly coal traders, cement and timber factories and sugar mills.





# Background Information Document and Invitation to Comment

## Proposed Kanga Coal Kusipongo Expansion Project



### More Information on the Project Scope

#### Underground Mine

- Two coal seams consisting of a top (Gus) and bottom (Dundus) seam will be mined where possible.
- The mining of both seams will employ the board and pillar methods with chequerboard pillar extraction.

#### Details about Proposed Surface Infrastructure

##### Adit A: Large Facility at Site A (Type II Adit)

- Inclined Adit providing access to miners and a conveyor to bring mined coal to surface with ventilation shafts in close proximity.
- Main electrical and distribution substation. Emergency back-up generators will also be included.
- Temporary waste facilities for domestic and hazardous waste.
- Mechanical and electrical workshops for underground mining equipment.
- The installation of potable water storage tanks and distribution system.
- Coal crushing and storage facility.

##### Adit B & D: Smaller Ventilation Shafts (Type I Adit)

- Ventilation shafts, including ventilation fan at Adit D. These will be serviced by electrical infrastructure.
- Stormwater diversion berms will be erected if required at the surface of ventilation shafts.

##### Overland Conveyor

- An overland conveyor system which brings coal from the new mine to the existing Maquasa West Adit and Maquasa East coal beneficiation conveyor system.
- A maintenance road will also be constructed alongside the conveyor.
- Fencing along the conveyor corridor, with crossings for vehicles, livestock and surrounding community members at key locations.
- A pipeline and associated pump to transfer potable water from the existing Maquasa East (or West) water supply facilities to Adit A.

##### Access Roads

- Access to Adit B and D will be almost entirely constructed along existing farm track routes up to the existing gravel district road.
- Access to Adit A will be along the existing district road.



## Background Information Document and Invitation to Comment

### Proposed Kangra Coal Kusipongo Expansion Project



#### The Environmental Impact Assessment Process

Under the EIA Regulations of 18 June 2010 under the NEMA (Act No. 107 of 1998) as amended, an EIA is required to be undertaken for the proposed development of an underground mine. This EIA will assess the positive and negative impacts of the proposed project. In addition, several other permitting processes are triggered including a mining rights application, and a water and waste licence application.

Environmental Resources Management (ERM) are the independent consultants who have been appointed to conduct these processes.

*The project activates the following listed activities under the EIA Regulations, 18 June 2010 under the NEMA (Act No. 107 of 1998), as amended:*

#### Government Notice R544:

- Activity 11
- Activity 13
- Activity 22
- Activity 24
- Activity 47

#### Government Notice R545:

- Activity 15

#### Government Notice R546:

- Activity 4
- Activity 12
- Activity 13
- Activity 14

*The following activities are triggered under the National Environmental Management: Waste Act 59 of 2008:*

#### Government Notice R718:

- Activity A(1)
- Activity A(3)
- Activity B(7)
- Activity A(2)
- Activity A(18)

#### The Public Participation Process: General



The relevant environmental Acts and Regulations include the Mining & Petroleum Resources Development Act, NEMA EIA Regulations, National Water Act and National Environmental Management: Waste Act. An integrated Public Participation Process will be carried to comply with the requirements of the various regulatory requirements and permitting processes. The objective of the public participation process is to inform stakeholders of the proposed project, involve them in the assessment of impacts and ensure that stakeholders are able to raise issues and concerns for consideration by ERM during the independent impact assessment, by Kangra and by the authorising authorities.

#### The Public Participation Process: Current Registration Phase

The first phase in our public participation process will be a registration phase, where interested and affected parties have the opportunity to register their interest. This Background Information Document is also being circulated to provide people a background on the proposed project and the associated assessment and authorisation processes.

Those with an interest in the process should register in the project so as to receive updates during the process and to be given the opportunity to comment through the process.

To register, contact Nomsa Fulbrook-Bhembe of Environmental Resources Management. She can be contacted at:

- **Telephone:** 011 798 4300
- **Fax:** 011 804 2899
- **Email:** nomsa.fulbrook-bhembe@erm.com
- **Postal address:** Postnet Suite 624, Private Bag X29, Gallo Manor, 2148

To ensure you are fully informed and receive all necessary information please register by contacting:  
Nomsa Fulbrook-Bhembe of ERM by 26 August 2011.



## Background Information Document and Invitation to Comment

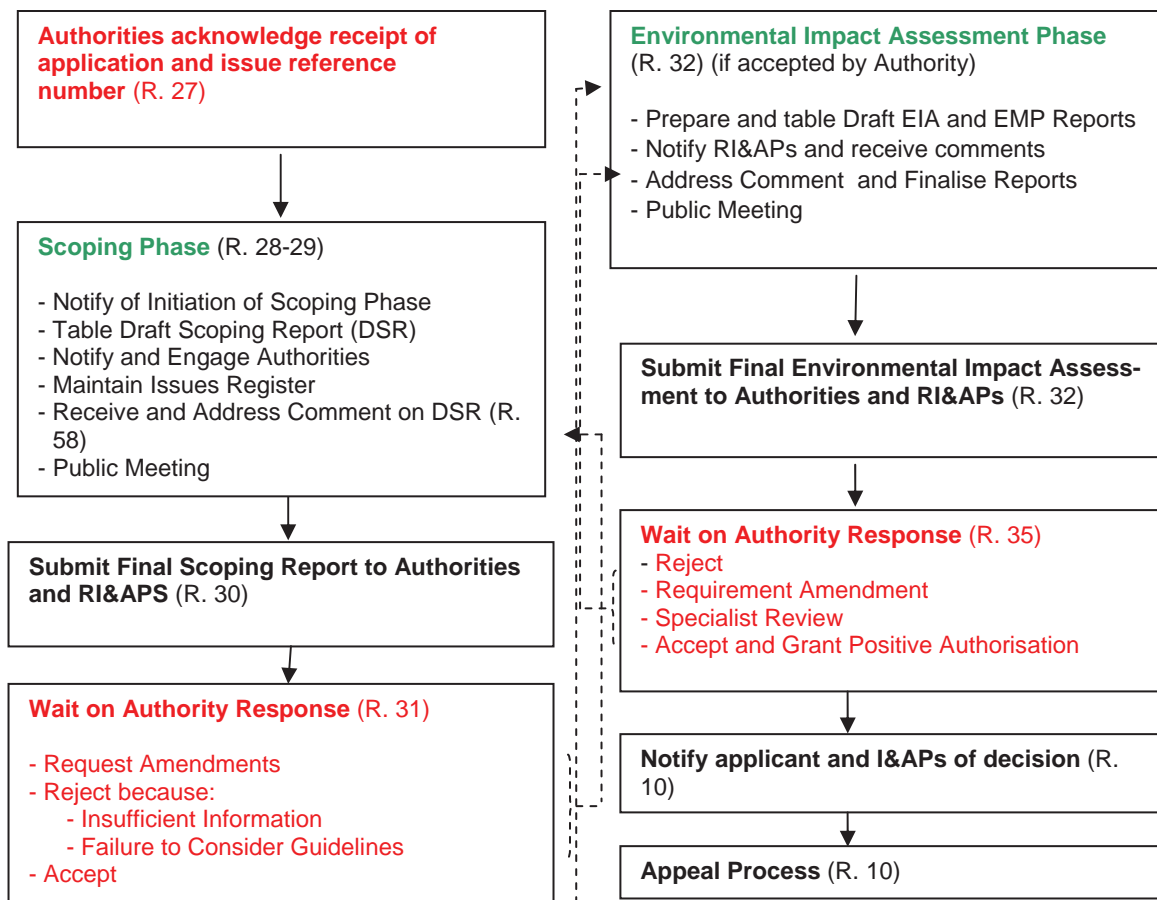
### Proposed Kangra Coal Kusipongo Expansion Project



#### Next Steps in the Public Participation Process: The EIA Phase

After the registration exercise, the EIA process will officially begin through a Scoping Phase and subsequently an Impact Assessment Phase. During the Scoping Phase a draft scoping report (DSR) will be made available for public review and comment. The DSR will serve to identify the impacts of the proposed development and include a Plan of Study for the EIA. Information regarding the release of the DSR will be made available to all stakeholders through an advertisement and through direct correspondence with registered I&APs (RI&APs).

The diagramme below shows the process that will be followed during the EIA process. After the initial registration period that runs until 26 August 2011, the EIA process will be initiated through the Scoping Phase.



#### Contact Information

For any information, to register or to comment, please contact Nomsa Fulbrook-Bhembe of Environmental Resources Management. She can be contacted at:

- Telephone: 011 798 4300
- Fax: 011 804 2899
- Email: [nomsa.fulbrook-bhembe@erm.com](mailto:nomsa.fulbrook-bhembe@erm.com)
- Postal address: Postnet Suite 624, Private Bag X29, Gallo Manor, 2148



Annex C1.2

## Afrikaans BID



## Agtergrond-Inligtingsdokument en Uitnodiging om Kommentaar te lewer

### Voorgenome Kangra Steenkool Kusipongo Uitbreidingsprojek



#### Doel van hierdie Dokument

Die doel van hierdie Agtergrond-Inligtingsdokument is om belanghebbendes van inligting te voorsien aangaande die voorgenome uitbreiding van Kangra Coal se Kusipongo Steenkoolmynboubedrywighede en die verwante Omgewings-impakstudie (OIS) en toelatingsprosesse. Dit vereis ook dat alle belanghebbendes as Geïnteresseerde en Geïmpakteerde Partye moet registreer.

Hierdie projek is onderhewig aan verskeie magtiging- en lisensieringsprosesse, insluitend 'n OIS ingevolge die vereistes van die OIS-Regulasies van 18 Junie 2010 onder die Wet op Nasionale Omgewingsbestuurs (WNOB) (Wet 107 van 1998), soos gewysig, 'n mynbouregte-aansoekproses ingevolge die Wet op Minerale- en Petroleumbronne Wet 28 van 2002 (WMPB), sowel as ander prosesse geassosieer met omgewingswetgewing, insluitend die Nasionale Waterwet en die Wet op Nasionale Omgewingsbestuur: Afval.

Die bemagtigingsowerhede vir die onderskeie magtiging- en lisensieringsprosesse sal die Mpumalanga Departement van Ekonomiese Ontwikkeling, Toerisme en Omgewing, die Nasionale Departement van Omgewingsake, die Departement van Waterwese en die Departement van Minerale Hulpbronne wees.

Hierdie prosesse vereis dat 'n openbare deelnameproses plaasvind. Geregistreerde Geïnteresseerde en Geïmpakteerde Party (RGG&GP) belanghebbendes sal die geleentheid gebied word om deel van die proses te wees en kwessies en besorgdhede wat hulle mag koester, te voor te le.

Om te verseker dat u ten volle ingelig is en alle nodige inligting bekom, registreer asseblief deur Nomsa Fulbrook-Bhembe van ERM teen 26 Augustus 2011 te kontak.

Tel: 011 798 4300

Faks: 011 804 2899

E-pos: nomsa.fulbrook-bhembe@erm.com

Posadres: Postnet Suite 90, Privaatsak X12, Tokai, 7966

#### Projekbeskrywing

Kangra Coal (Edms) Bpk is van voorneme om hulle huidige mynboubedrywighede-fasiliteit by die Savmore Steenkoolmyn, ongeveer 15km wes van Driefontein, naby Piet Retief in Mpumalanga, uit te brei. Die Savmore Steenkoolmyn is tans operasioneel op die Maqausa -Oos, -Wes as ook die Westelike uitgebreide mynreg gebiede. Huidige bedrywighede behels beide ondergrondse en oopskagmynmetodes.

Die voorgenome uitbreidingsprojek betrek 'n ondergrondse myn by die Kusipongo-hulpbron. Die verwagte volume van mynloopproduksie (MLP) is 5 Mtpa, die meeste produkte synde vir uitvoer vir gebruik as termiese steenkool. Die leeftyd van die voorgenome myn sal na beraming ongeveer 30 jaar wees. Die mynboumetode sal bord- en pilaarmetodes met ruitbord pilaarekstraksie toepas, met gebruikmaking van aaneenlopende myntoerusting.

#### Project Scope

Die omvang van die projek behels die ontwikkeling en konstruksie van:

- 'n Ondergrondse myn by Terrein X soos aangedur op die kaart (bladsy 2);
- 'n Groot skag\* fasiliteit by Ligging A;
- Twee kleiner ventilasie skagte\* by Ligging B en D;
- 'n Bognrdse vervoerder vir die vervoer van steenkool;
- 'n Toegangspad; en
- Elektrisiteitsdistribusie-infrastruktuur.

\*'n Skag is 'n vertikale of horisontale tonnel wat vanaf die grond oppervlakte na die ondergrondse myn deurloop.

#### Ligging van Projek

Die voorgenome Skag A is geleë op die volgende plase:

- Twyfelhoek 379 (Gedeelte 2 en 3)
- Donkerhoek 14 (Gedeelte 4)

Die voorgenome Skag B is geleë op plase:

- Kransbank 15 (Gedeelte 2 en restant)

Die voorgenome Skag D is geleë op plase:

- Donkerhoek 14 (Gedeelte 22 en restant van gedeelte 2)

Landvervoerder:

- Twyfelhoek 379 (Gedeelte 2 en restant)
- Rooikop 18 (Gedeelte 1 en restant)
- Nootgezien 381 (Restant)

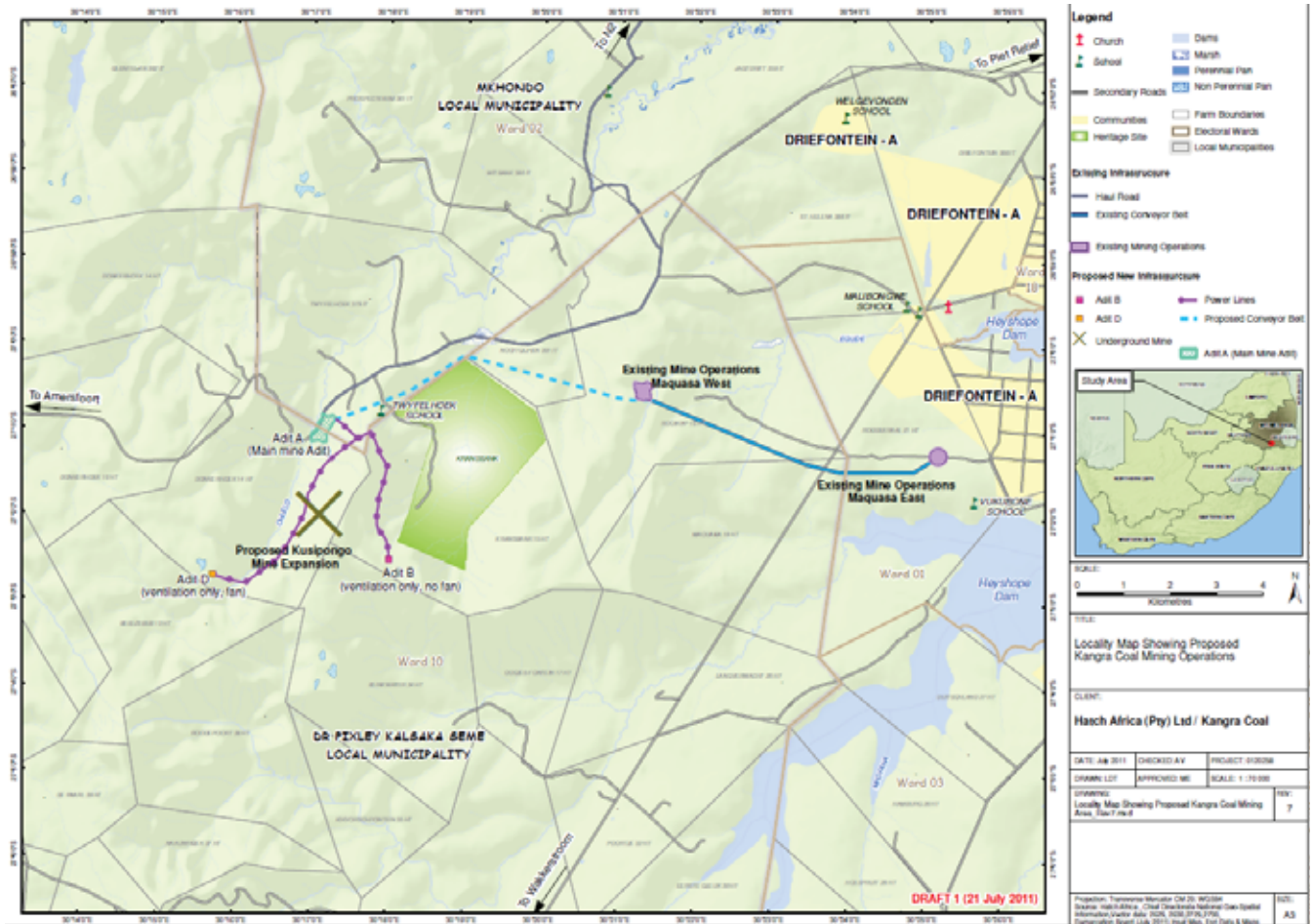
#### WIE IS KANGRA COAL?

Kangra Coal is in 2001 geïnkorporeer as Zinan Property Holdings en die naam is in 2003 verander na Kangra Coal (Edms) Bpk. Kangra Coal is gebaseer in Piet Retief, Suid-Afrika.

Kangra Coal was voorheen 'n privaat sake-onderneming. In 2004 het die Suid-Afrikaanse beleggingsmaatskappy Shanduka Coal Investments (Edms) Bpk tot die maatskappy toegetree. Tydens 2007 het die Spaanse nutsmaatskappy Union Fenosa (nou Gas Natural Fenosa) die hoofaandeel bekom, met Kangra Coal wat 'n filiaal van Union Fenosa SA geword het.

Kangra Coal se besigheid het drie hoofstrome: die uitvoer van steenkool deur handelskontakte, voorsiening aan die plaaslike mark asook uitvoere na Indië. Kliënte is merendeels steenkoolhandelaars, sement- en houtfabrieke en suikermeulens.





### Meer inligting oor die bestek van die projek

#### Ondergrondse Myn

- Twee steenkool soom bestaande uit 'n boonste soom (Gus) en onderste soom (Dundus) sal woor moontlik gemyn word.
- Die myn metode sal van ondergrondse tonnels en pilare gebruik maak waar die steenkool gedurigdeur onttrek word.

#### Besonderhede oor die Voorgestelde Bogrondse Infrastruktuur Skagte A: Groot fasiliteit by ligging A (Tipe II Skag)

- Skuin skag gee toegang vir myners en 'n vervoerband wat steenkool na die oppervlakke toe sal bring, sal naby die vertikale ventilasie skagte opgerig word.
- Hoof elektriese en distribusie substasie, skakel tuig en verlaagtransformators. Noodondersteuning opwekkers sal ook ingesluit word en sal in die vorm van 'n substasie geïnstalleer word.
- Tuidelike afvalfasiliteite vir huishoudelike en gevaarlike afvalhysbakke.
- Meganiese en elektriese werkswinkels vir ondergrondse myntoerusting.
- Die installering van drinkbare water opgaartenks en verwante distribusiestelsel, insluitend brandweerinfrastruktuur.
- Steenkool breker en stoor fasiliteit.

#### Skagte B & D: Kleiner Ventilasië Skagte (Tipe I Skag)

- Ventilasië skagte, met ventilasië waaier by Stag D. Elektriese infrastruktuur sal ook hier aangebring word.
- Stormwater-afleiberms sal indien nodig by die oppervlak van ventilasiëskagte opgerig word.

#### Landvervoerder:

- 'n Oorlandse vervoerband sal steenkool bring van die voorgestelde nuwe myn na die bestaande Maquasa Wes skag en Maquasa Oos Steenkool vervoer sisteem. 'n Dienspad sal ook langs die oorlandse vervoerband opgerig word.
- Heinings om die vervoerband, wat voorsiening maak vir oorgange vir voertuie en implemente, lewendige have en omliggende gemeenskaplede, waardeur toegang oor die grondvlakvervoerbandstelsel weer ingestel word.
- 'n Pyplyn en verwante pomp om drinkbare water vanaf die bestaande Maquasa-Oos (of -Wes) watervoorraad-fasiliteite na die Tonnelle te vervoer.

#### Toegang paaië

- Toegang tot die skagte B en D sal omtrent heeltemal langs bestaande plaasvoetpaaië opgerig word tot by die bestaande gruisdistrikpad.
- Toegang tot die skag A sal langs die bestaande gruisdistrikpad wees.

### Die Omgewingsimpakstudieproses

Onder die OIS-Regulasies van 18 Junie 2010 onder die WNOB (Wet Nr. 107 van 1998) soos gewysig, word vereis dat 'n OIS onderneem word vir die voorgenome ontwikkeling van 'n ondergrondse myn. Hierdie OIS sal die positiewe en negatiewe impakte van die voorgenome projek assesseer. Daarbenewens word verskeie ander toelatingsprosesse in werking gestel, insluitend 'n aansoek om mynbouregte, en 'n aansoek om 'n water- en afvalbestuurlisensie.

Environmental Resources Management (ERM) is die onafhanklike konsultante aangestel om hierdie prosesse uit te voer.

Die projek aktiveer die volgende gelyste aktiwiteite onder die OIS-Regulasies, 18 Junie 2010 onder die WNOB (Wet Nr. 107 van 1998), soos gewysig:

#### Regeringskennisgewing R544:

- Aktiwiteit 11
- Aktiwiteit 13
- Aktiwiteit 22
- Aktiwiteit 24
- Aktiwiteit 47

#### Regeringskennisgewing R545:

- Aktiwiteit 15

#### Regeringskennisgewing R546:

- Aktiwiteit 4
- Aktiwiteit 12
- Aktiwiteit 13
- Aktiwiteit 14

Die volgende aktiwiteite word in werking gestel onder die Wet op Nasionale Omgewingsbestuur: Afval, Wet 59 van 2008:

#### Regeringskennisgewing R718:

- Aktiwiteit A(1)
- Aktiwiteit A(3)
- Aktiwiteit B(7)
- Aktiwiteit A(2)
- Aktiwiteit A(18)

### Die Openbare Deelnameproses: Algemeen



Die relevante Omgewingswette en -Regulasies sluit in die Wet op Mynbou & Petroleumontwikkeling, WNOB OIS Regulasies, Nasionale Waterwet en die Wet op Nasionale Omgewingsbewaring: Afval. 'n Geïntegreerde Openbare Deelnameproses sal uitgevoer word om te voldoen aan die verskeie regulerende vereistes en toelatingsprosesse. Die doelwit van die openbare deelnameproses is om belanghebbendes in te lig oor die voorgenome projek, hulle te betrek by die assessering van impakte en te verseker dat belanghebbendes in staat gestel word om kwessies en besorgdhede te opper vir oorweging deur ERM tydens die onafhanklike impakstudie deur Kangra en deur die magtigingsowerhede.

### Die Openbare Deelnameproses: Huidige Registrasiefase

Die eerste fase in ons openbare deelnameproses sal 'n registrasiefase wees, waar geïnteresseerde en geaffekteerde partye gevra sal word om hulle belang te registreer. Hierdie Agtergrond-Inligtingsdokument word ook gesirkuleer om mense van 'n agtergrond te voorsien aangaande die voorgenome projek en die verwante assessering- en magtigingsprosesse.

Diegene met 'n belang in die proses moet in die projek registreer om sodoende opdatings tydens die proses te verkry en om die geleentheid gebied te word om regdeur die proses kommentaar te lewer.

Om te registreer, kontak Nomsa Fulbrook-Bhembe van Environmental Resources Management. Sy kan gekontak word by:

- **Telefoon:** 011 798 4300
- **Faks:** 011 804 2899
- **E-pos:** nomsa.fulbrook-bhembe@erm.com
- **Posadres:** Postnet Suite 624, Privaatsak X29, Gallo Manor, 2148

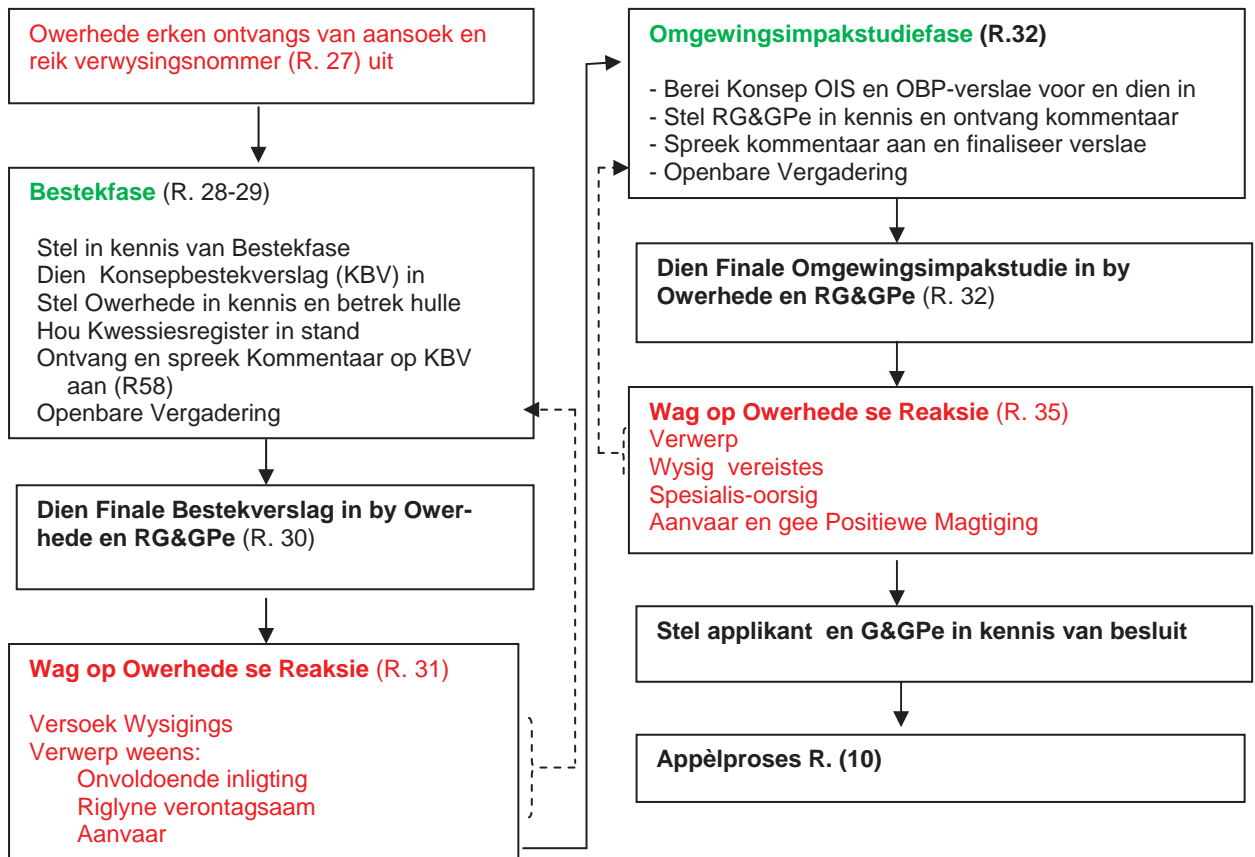




**Volgende Stappe in die Openbare Deelnameproses: Die OIS-Fase**

Na die registrasieproses sal die OIS-proses amptelik begin deur 'n Bestekfase en daarna 'n Impakstudiefase. Tydens die Bestekfase sal 'n Konsepbestekverslag (KBV) beskikbaar gestel word vir openbare oorsig en kommentaar. Die KBV sal dien om die impakte van die voorgenome ontwikkeling te identifiseer en 'n Plan van Aksie vir die OIS in te sluit. Inligting rakende die vrystelling van die KBV sal aan alle belanghebbendes beskikbaar gestel word deur middel van 'n advertensie en deur middel van direkte korrespondensie met geregistreerde G&GPe (RG&GPe).

Die onderstaande diagramme dui die proses aan wat gevolg sal word tydens die OIS-proses. Na die aanvanklike registrasieperiode wat tot 26 Augustus 2011 sal duur, sal die OIS-proses deur die Bestekfase geïnisieer word.



**Kontakbesonderhede**

Vir enige inligting, om te registreer of kommentaar te lewer, kontak asseblief vir Nomsa Fulbrook-Bhembe van Environmental Resources Management. Sy kan gekontak word by:

Telefoon: 011 798 4300

Faks: 011 804 2899

E-pos: fulbrook-bhembe@erm.com

Posadres: Postnet Suite 624, Privaatsak X29, Gallo Manor, 2148

Annex C1.3

Zulu BID



## Umqulu Wolwazi Olusemuva Nesicelo Sokuphawula Ukusikiselwa Kokukhuliswa Kwephrojekthi ye-Kangra Coal Kusipongo



### Injongo Yalomqulu

Injongo Yalomqulu Yolwazi Olusemuva ukunikeza abanesabelo ebhizinisini ulwazi mayelana nokukhuliswa okusikiselwe komsebenzi wokumayina amalahlwe we-Kangra Coal Kusipongo kanye Nokuhlolwa Kokuthinteka Kwemvelo okuhlangene (i-EIA) nokuvumela izinqubo. Ibiza futhi nabanesabelo ebhizinisini ukuba babalise Njengabahlanganyeli Abanesithakazelo Nathintekayo.

Lephrojekthi ingaphansi kwezinqubo zokulayisensa nokugunyazwa ezimbalwa, kuhlanganise ne-EIA ngokuvumelana nezindingeko Zemithetho ye-EIA yango-18 June 2010, Ngaphansi Komthetho Wokuphatha Ezemvelo Wesizwe (i-NEMA) (Umthetho 107 ka-1998), njengoba ulungisiwe, inqubo yokufaka amalungelo okumayina ngovumelana Nomthetho 28 Wezokwembiwa Phansi kanye Nophalafini Wamalambu ka-2002 (i-MPRDA), kanye nezinye izinqubo ezihlangene nemithetho yemvelo kuhlanganise Nomthetho Wamanzi Esizwe kanye Nokuphathwa Kwemvelo Yesizwe: Umthetho Wokungcola.

Amagunya agunyaza izinqubo zawo zokugunyaza nokulayisensa ayoba Umnyango wase-Mpumalanga Wokuthuthukiswa Kwezomnotho, Zokuvakasha kanye Nemvelo, Umnyango Wesizwe Wezomvelo, Umnyango Wezamanzi kanye Nomnyango Wezokwembiwa.

Lezinqubo zidinga ukuthi inqubo yokuba nesandla komphakathi yenzeke. Ababambi icasa Beqembu Elinesithakazelo Elibalisiwe Nelithenthekanyo (RI&AP) bayoba nethuba yokuba inxenye yalenqubo nokuphakamisa izinkinga kanye okungenzeka banakho.

Ukuqinisekisa ukuthi uyaziswa ngokuqele nokuthola imininingwane yonke efanele sicela ubalise ngokuthinta Nomsa Fulbrook-Bhembe we-ERM ngaphambi kwezi-26 August 2011.

Tel: 011 798 4300

Fax: 011 804 2899

Email: nomsa.fulbrook-bhembe@erm.com

Ikheli: Postnet Suite 90, Private Bag X12, Tokai, 7966

### Incazelo Yephrojekthi

Kangra Coal (Pty) Ltd isikisela ukukhulisa indawo yayo yamanje yomsebenzi wemayini e-Savmore Colliery, eduze ne-Piet Retief e-Mpumalanga. Savmore Colliery kwamanje esebenzela Zempumalanga ye-Maquasa, Intshonalanga namalungelo wemayini Asentshonalanga Enwebekile. Imisebenzi yamanje isibenzisa zombili izindlela zokumayina ngaphanzi komhlaba kanye nokumayina okuvulekile kwangaphezulu.

Iphrojekthi yokukhulisa esikeselwayo ihlanganisa imayini yangaphanzi komhlaba e Kusipongo Resource, engaba amakhilomitha angu-15 Entshonalanga ye-Driefontein. Isilinganiso sokukhiqiza okulindelwe sokusebenza kwemayini [run-of-mine] (ROM) silindelwe ukuba ama-Mtpa angu-5, futhi ubuningi bomkhiqizo buyothunyelwa ngaphandle ukuze busetshenziswe njengamalahlwe wokutshisisa. Imayini esikiselwayo ilinganiselwa ukuthatha iminyaka engaba ngu-30 ikhona.

### Isinyathelo Esilandelayo Kuyinqubo Yokuba Nesandla Komphakathi: Isigaba se-EIA

#### Ubukhulu be-Phrojekthi

Ubukhulu balephrojekthi esikiselwayo buhlanganisa ukuthuthukiswa nokwakhiwa kwe:

- Imayini yangaphanzi komhlaba e-Ndawo X njengoba kuboniswe kw balazwe ekhasini elilandelayo;
- Indawo enkulu Yephaseji\* kwi-Ndawo A;
- Amaphaseji\* amabili amancane wokungenisa umoya kwi-Ndawo B no D;
- Ibhandi elihambayo langangaphezulu komhlaba lokuhambisa amalahlwe;
- Imigwaqo yokungena; kanye
- Nempahla yokwabiwa kwegesi.

*\*Iphaseji iwumsele (ocishe uqonde thwi noma ovundlile) osukela ngaphezulu ukuya ngaphansi kwemayini.*

#### Indawo Yephrojekthi

Iphaseji A esikiselwayo isemapulazini alandelayo:

- Twyfelhoek 379 (Ingxenye 2 no-3)
- Donkerhoek 14 (Ingxenye 4)

Iphaseji B esikiselwayo isepulazini elandelayo:

- Kransbank 15 (Ingxenye 2 Nokusele)

Iphaseji D esikiselwayo isepulazini elandelayo:

- Donkerhoek 14 (Ingxenye 22 Nokusele Kwengxenye 2)

Ibhandi Elihambayo Langaphezulu Komhlaba:

- Twyfelhoek 379 (Ingxenye 2 Nokusele)
- Rooikop 18 (Ingxenye 1 Nokusele)
- Nooitgezien 381 (Nokusele)

### KANGRA COAL IYINI?

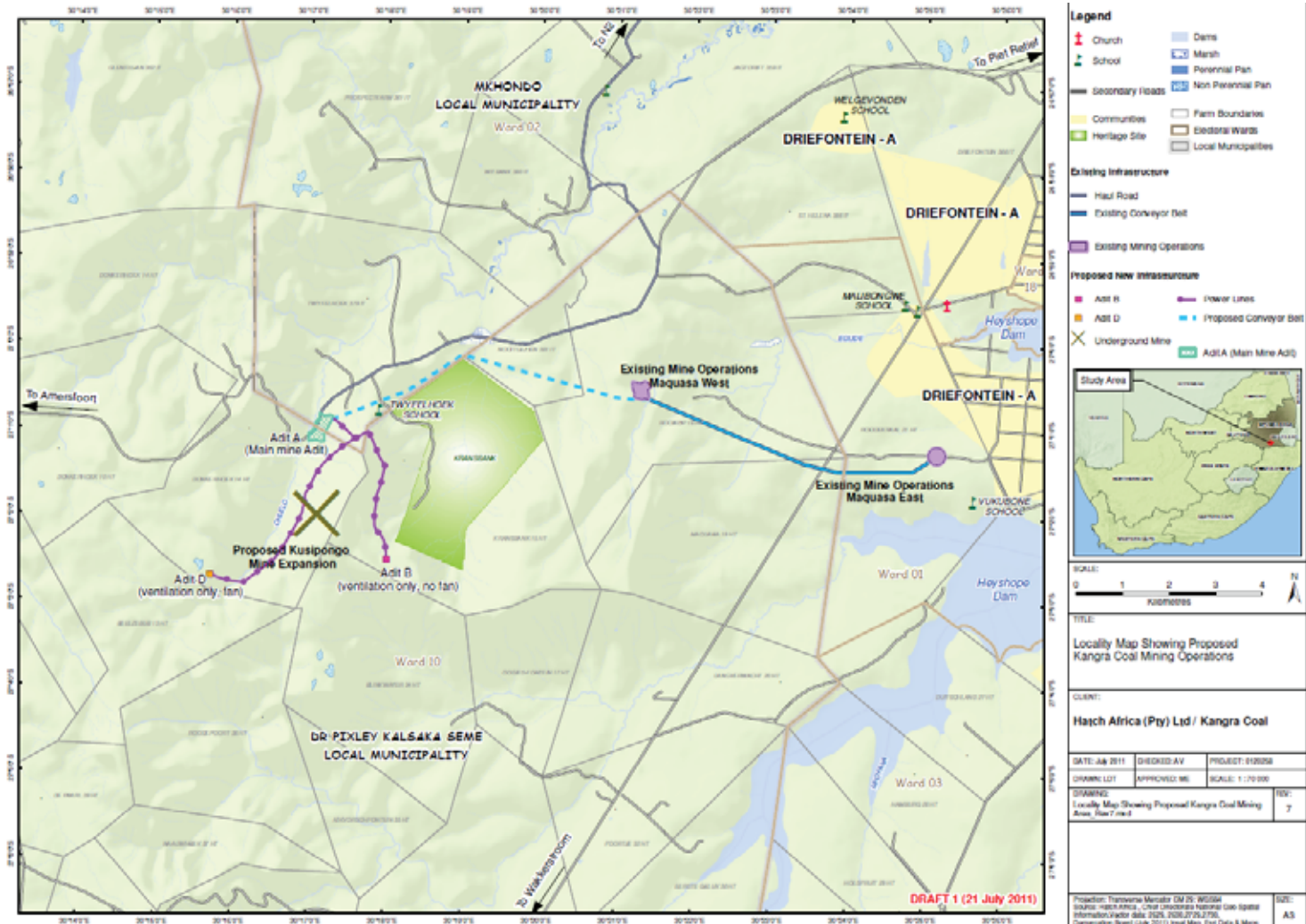
Kangra Coal yaqaliswa kuyi Zinan Property Holdings ngo-2001, futhi igama lashintshelwa ku-Kagra Coal (Pty) Ltd ngo-2003. Kangra Coal ise Piet Retief, Eningizimu Afrika.

Kangra Coal ekuqaleni bekuyibhizinisi yomuntu siqu. Ngo-2004 inkampani eyenza inzalo YaseNingizimu Afrika, i-Shanduka Coal Investments (Pty) Ltd iye yangena kulenkampani. Ngo-2007 Inhlangothi Fenosa yase-Spain yosizo (manje iyi Gas Natural Fenosa) iyeyaba nesabelo esikhulu, okuye kwenza ukuthi Kangra Coal yibe ngaphanzi Kwenhlangothi Fenosa. S.A.

Kangra Coal inemicu emithathu emikhulu kuyibhizinisi layo: ithumela amalahlwe ngaphandle ngezimvumelwano zokuhwebisana, inikeza imakethe yasendaweni futhi ithumela ngaphandle e-India. Ubuningi bamakhasimende amabhizinisi wamalahlwe, usimende kanye namankampani wenkuni nezindlu zokugaya umoba.



# Umqulu Wolwazi Olusemuva Nesicelo Sokuphawula Ukusikiselwa Kokukhuliswa Kweprojekthi ye-Kangra Coal Kusipongo



## Ukwaziswa okwengeziwe Ngobukhulu be-Phrojekthi

### Imayini Yangaphanzi Komhlaba

- Imisele emibili yamaladle yaphezulu (Gus) neyaphansi (Dundus) izogutshwa uma kunokwenzeka.
- Ukugutshwa kwemisele emibili kuzosebenzisa izindlela zepulangwe nensika nokutapa kwensika kwe-chequerboard, kusetshenziswa impahla yemayini eqhubekayo.

### Iminingwane mayelana Nempahla Yangaphezulu Esikiselwe

#### Iphaseji A: Indawo Enkulu kwi-Ndawo A (Iphaseji Yohlobo II) ihlanganisa:

- Imigodi yokungenisa umoya eqonde kuthe ndindilizi kuhlangukisa isibhibhizelo esikhiphayo esingenisa abasebenzi bemayini nebhandi elihambayo ukuletha amaladle agutshiwe phezu komhlaba.
- Isiteshi esincane sogesini nesabayo. Ijeneretha yezimo eziphuthumayo nayo izohlanganiswa.
- Izindawo zokunqola ezisetshenziselwa ukunqola kwasendaweni nokuyingozi.
- Izindlu zokusebenzela zemishini kanye nogesi zempahla yemayini yangaphanzi komhlaba.
- Ukufakwa kwamatangi apathekayo wamanzi namasistimu wokuyabelana, kuhlangukisa nempahla yokucima umlilo.
- Indawo yokugaya nokugcina amaladle.

#### Iphaseji B & D: Imigodi Emincane Yokungeniswa Komoya (Iphaseji Yohlobo I)

- Imigodi yokungeniswa komoya, kuhlangukisa isibhibhizelo sokungenisa umoya ku-Phaseji D. Lezi ziyonakekelwa impahla yogesi.
- Imisele ecijile yokudlulisa amanzi emvula izokwakhiwa uma kudingeka ngaphezulu kwemigodi yokungenisa umoya.

#### Ibhandi Elihambayo Langaphezulu Komhlaba

- Ibhandi elihambayo langaphezulu komhlaba eliletha amaladle kusukela kumayini omusha ukuya kuyibhande elihambayo eligaya amaladle elikhona kakade Lasephasejini Esempumalanga ye-Maquasa West Adit kanye Nasentshonalanga ye-Maquasa.
- Ufakwa kotingo ngasemhubheni webhandi elihambayo, nedawo yokudlula kwezimmoto, izifuyo kanye nabantu bemphakathi osendaweni.
- Ipayipi kanye nephampu elihlobene lokuhambisa amanzi apathekayo kusukela ezindaweni ezikhona kakade zokunikeza amanzi zase Mpumalanga Maquasa (noma Ntshonalanga) ukuya Kuphaseji.

#### Imigwaqo Yokungena

- Ukungena Kuphaseji B no-D kuzokwakhiwa cishe ngasezindleleni ezincane zasepulazini ezikhona kakade kuze kufike kumgwaqo wesigodi wenhlabathi okhona kakade.
- Ukungena Kuphaseji A kuyoba endleleni ekhona kakade yomgwaqo wesifunda.



**Umqulu Wolwazi Olusemuva Nesicelo Sokuphawula**  
**Ukusikiselwa Kokukhuliswa Kwephrojekthi**  
**ye-Kangra Coal Kusipongo**



**Inqubo Yokuhlolwa Kokuthinteka Kwemvelo**

Ngaphansi Kwemithetho ye-EIA yango-18 June 2010 ngaphansi kwe-NEMA (Umthetho 107 wango-1998) olungisiwe, kuyadingeka ukuthi i-EIA yenziwe mayelana nokuthuthukiswa okusikiselwe kwemayini yangaphansi. Le EIA izohlola izindlela zokuthinteka okuqondile nokun- gaqondile kwalephrojekthi esikiselwe. Ngaphezu kwalokho, izinqubo ezinye ezigunyazwayo ezimbalwa ziyezaba umthelela kuhlanganise isicelo samalungelo wemayini, namanzi kanye nesicelo selayisensi yamanzi.

Environmental Resources Management (ERM) umxhumanisi ozimele owabelwe ukuqhuba lezinqubo.

*Lephrojekthi ivuselela olunye uhlu olulandelayo lwemisebenzi ngaphansi Kwemithetho -EIA Imithetho EIA yango-18 June 2010 ngaphansi kwe-NEMA (Umthetho 107 wango-1998), njengoba kulungisiwe:*

**Isaziso Sikahulumeni R544:**

- Umsebenzi 11
- Umsebenzi 13
- Umsebenzi 22
- Umsebenzi 24
- Umsebenzi 47

**Isaziso Sikahulumeni R546:**

- Umsebenzi 4
- Umsebenzi 12
- Umsebenzi 13

**Isaziso Sikahulumeni R545:**

- Umsebenzi 15

*Imisebenzi elandelayo iyeyaba umthelela ngaphansi Kokuphathwa Kwezemvelo Ezweni Umthetho Wokungcola 59 wango 2008:*

**I  
saziso Sikahulumeni R718:**

- |                  |                   |
|------------------|-------------------|
| • Umsebenzi A(1) | • Umsebenzi A(2)  |
| • Umsebenzi A(3) | • Umsebenzi A(18) |
| • Umsebenzi B(7) |                   |

**Inqubo Yokuba Nesandla Komphakathi: Okunye Okuvamile**



Imithetho eqondene nezemvelo ihlanganisa Umthetho Wokuthuthukiswa Kwencebo Yemayini Nopetiloli, imithetho ye-NEMA EIA, Umthetho Wezwe Wamanzi kanye Nokuphathwa Kwezemvelo Ezweni: Umthetho Wokungcola. Inqubo Yokuba Nesandla Komphakathi Ehlanganisiwe izokwenziwa ukuthi ivumelane nezindingeko zemithetho ehluahlukene nezinqubo zokugunyazwa. Injongo yenqubo yokuba nesandla komphakathi iyukwazisa abaneqhaza kwiphrojekthi esikiselwe, ibahlanganise ekuhlolweni kokuthinteka kube nokuqiniseka ukuthi abaneqhaza bayakwazi ukukhipha uvu lwabo ukuthi zicatshangelwe i-ERM phakathi nokuhlolwa kokuthinteka kokuzimela, i-Kangra nabagunyazayo.

**Inqubo Yokuba Nesandla Komphakathi: Isigaba Samanje Sokubhalisa**

Isigaba sokuqala kwenqubo yethu yokuba nesandla komphakathi kuzoba isigaba sokubhalisa, kulabo abanesithakazelo nabathintekayo bazocelwa ukuba babhalise izithakazelo zabo. Umqulu Wolwazi Olusemuva luyelwajikeleziswa ukuze kutholakale abantu abanolwazi ngale phrojekthi ehlobene nokuhlolwa kanye nokughunyazwa kwenqubo.

Kulabo abanesithakazelo kulenqubo kudingeka babhalise kule phrojekthi ukuze bakwazi ukuthola ukwaziswa phakathi kwenqubo banikwe ithuba lokusikisela phakathi kwenqumo.

Ukuze ubhalise, thintana no Nomsa Fulbrook-Bhembe wase Environmental Resources Management. Angathintwa ku:

**Ucingo:** 011 798 4300

**Fax:** 011 804 2899

**Imeyli:** [nomsa.fulbrook-bhembe@erm.com](mailto:nomsa.fulbrook-bhembe@erm.com)

**Ikheli:** Postnet Suite 624, Private Bag X12, Gallo Manor, 2148

Ukuqinisekisa ukuthi uyaziswa ngokugcwele nokuthola imininingwane yonke efanele sicela ubhalise ngokuthintana no Nomsa Fulbrook-Bhembe we-ERM ngaphambi kwezi-26 August 2011.





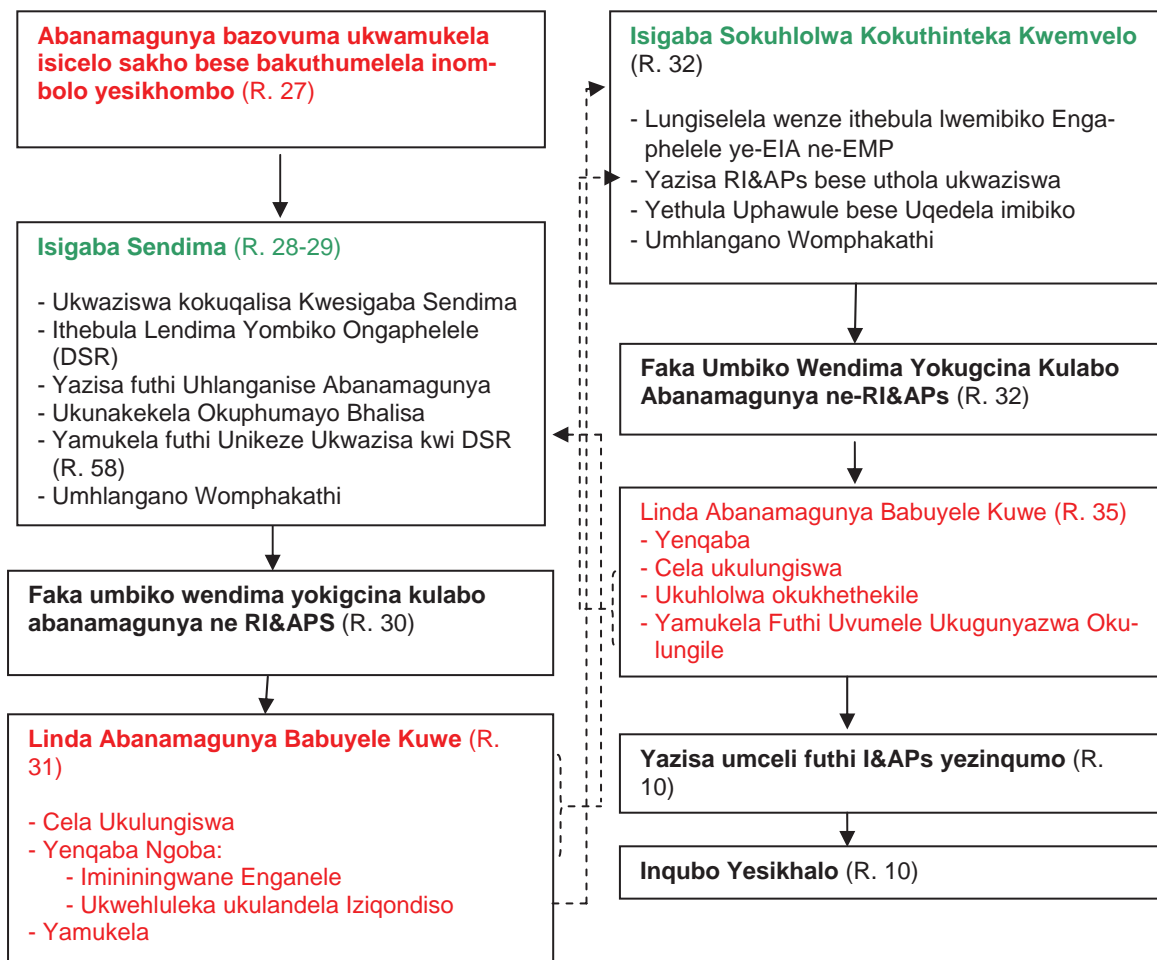
**Umqulu Wolwazi Olusemuva Nesicelo Sokuphawula**  
 Ukusikiselwa Kokukhuliswa Kwephrojekthi  
 ye-Kangra Coal Kusipongo



**Izinyathelo Esilandelayo Kuyinqubo Yokuba Nesandla Komphakathi: Isigaba se-EIA**

Ngemva kokubhalisa , inqubo ye-EIA izoqala ngokusemthethweni Ngesigaba Sendima nesigaba sokuhlolwa. Phakathi nesigaba sendima kuzoba nombiko ongaphellele wendima (DSR) kuzokwenziwa kutholakale okubuyekeziwe kumphakathi. I-DSR izokwazi ukubona ukuthinteka kwentuthuko esikiselwe futhi kuhlangelelwe nepulani lokulungiselela i-EIA. Imininingwani emayelana nokukhuliswa kwe-DSR kuzokwenziwa kutholakale kubo bonke abaneghaza ngokukhangisa ngokuvumelana ngokuqondile ngokubhaliswa kwi-I&APs ( RIAPs).

Isifanekiso esingenhla sibonisa izinqubo ezizolandelwa phakathi nequbo ye-EIA. Ngemva kwesikhathi sokuqaliswa kokubhaliswa esiyiqhubeka kuze kube 26 August 2011 inqubo ye-EIA izoqaliswa Ngesigaba Sendima .



**Imininingwani Yokuthintana**

Uma kudingeka eminye imininingwane ukubhalisa noma ukuphawula sicela uthinte u Nomsa Fulbrook-Bhembe wase Environmental Resources Management. Angatholakala:

- Ucingo: 011 798 4300
- Fax: 011 804 2899
- Imeyli: [nomsa.fulbrook-bhembe@erm.com](mailto:nomsa.fulbrook-bhembe@erm.com)
- Ikheli: Postnet Suite 624, Private Bag X12, Gallo Manor, 2148



Annex C2

## Photolog



Photo 1. Site Notice Placement - Daggakraal Clinic



Photo 2 Site Notice Placement - Daggakraal Community Hall



*Photo 3 Site Notice Placement - Dirkiesdorp Clinic*



Photo 4 Site Notice Placement - Dirkiesdorp Ngema Shop



Photo 5 Site Notice Placement - Driefontein Corner Shop





*Photo 6 Site Notice Placement - Driefontein Motor Spares*



*Photo 7 Site Notice Placement - Driefontein Thusong Centre*



Photo 8 *Flyer Distribution at Thuthukani*



Photo 9 *Kanluka Chairperson Receiving Public Participation Materials*



*Photo 10 Dropping of Material at Birdlife*



*Photo 11 Site Notice Placement - Mkhondo Municipality*









Photo 14 Site Notice Placement - Piet Retief Post Office



Photo 15 Site Notice Placement - Dr Pixley Kalsaka Seme Local Municipality 1



Photo 16 Site Notice Placement - Dr Pixley Ka Isaka Seme Local Municipality 2



Photo 17 Site Notice Placement - Twyfelhoek primary school



Photo 18 Site Notice Placement - Volksrust Library 1



Photo 19 Background Information Document - Volksrust Library 2





Photo 20 Site Notice Placement - Volksrust Post Office



Photo 21 Site Notice Placement - Volksrust Post Office 2



Photo 22 Site Notice - Wakkerstroom Library



Annex C3

Site Notice – I&AP  
Notification and  
Registration

- *C3.1 – English Site Notice*
- *C3.2 – Afrikaans Site Notice*
- *C3.3 – Zulu Site Notice*

Annex C3.1

## English Site Notice

Kangra Coal (Pty) Ltd. is considering expanding their coal mining operations at the Savmore Colliery, to include the Kusipongo coal resource situated between the Mkhondo and Dr Pixley Kalsaka Seme Municipalities in Mpumalanga. The site of the proposed expansion is situated approximately 15km west of Driefontein near Piet Retief. The proposed activity involves the development of an underground mine, thereby extending their existing Maquasa East and West mining activities.

In accordance with the relevant environmental regulations, the Environmental Impact Assessment requires the following authorisations/licenses prior to commencement:

- **Environmental Authorisation** from the Mpumalanga Department of Economic Development, Tourism and Environment
- **Water Use License** from the Department of Water Affairs
- **Mining Right Application** from the Department of Mineral Resources
- **Waste Management License** from the Department of Environmental Affairs

### Become Involved

Environmental Resources Management Southern Africa (Pty) Ltd (ERM) is the independent environmental consultant coordinating the authorisation and licensing processes listed above. To register as an Interested & Affected Party, to receive further information on the project and to participate in the process please submit your details to the contact person given below.

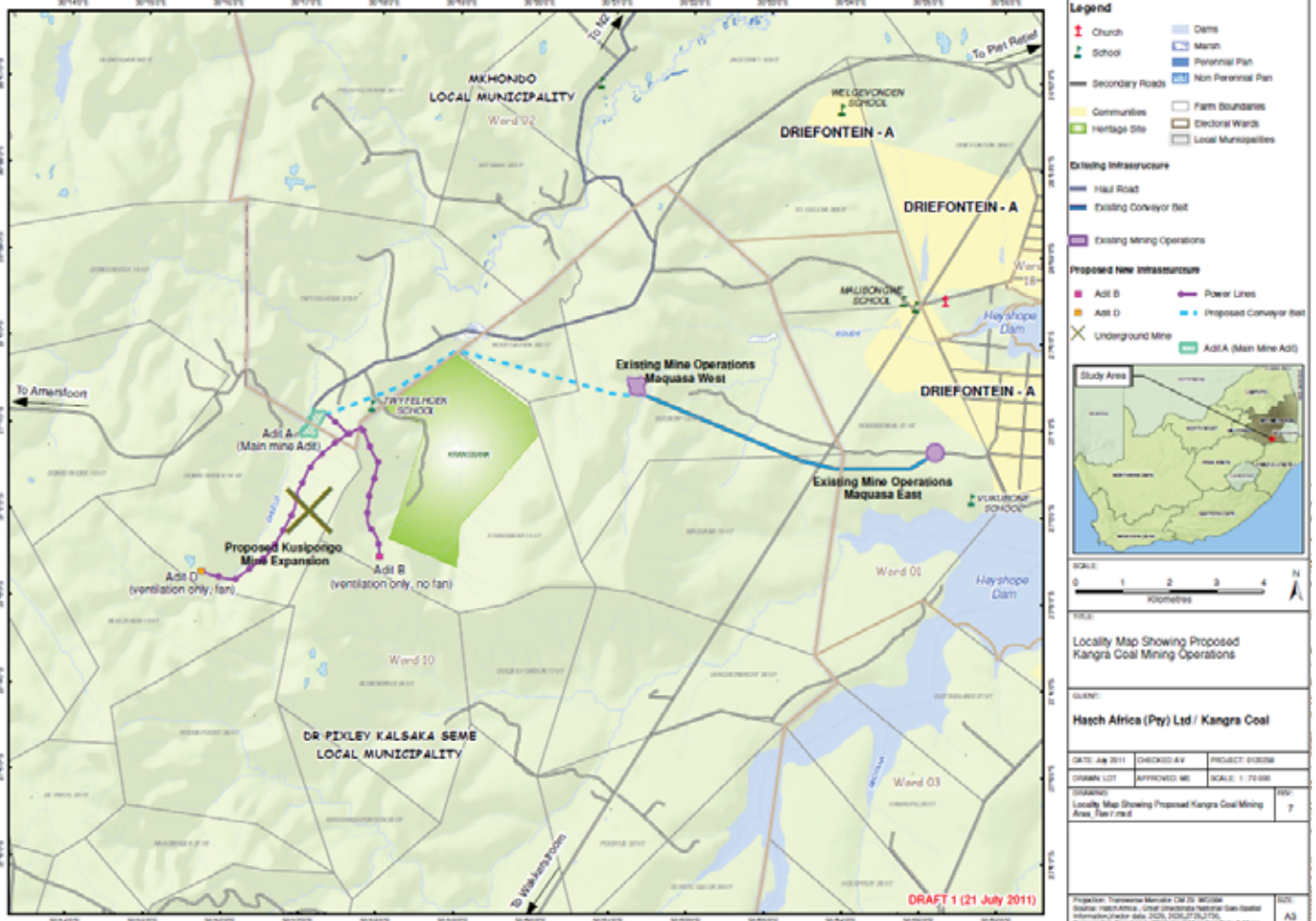
**Nomsa Fulbrook-Bhembe**

011 798 4300 (Tel);

011 804 2899 (Fax); or

Nomsa.fulbrook-bhembe@erm.com

To ensure you are fully informed and receive all necessary information please register by contacting Nomsa Fulbrook-Bhembe of ERM by 26 August 2011. The (EIA) Scoping Phase will begin thereafter.





Annex C3.2

## Afrikaans Site Notice

Voorgenome Kangra Coal Kusipongo  
Uitbreidingsprojek

Kangra Coal (Edms) Bpk oorweeg dit om hulle steenkoolmynboubedryghede by die Savmore Steenkoolmyn uit te brei om die Kusipongo steenkoolbron in te sluit. Die terrein van die voorgenome uitbreiding is ongeveer 15km wes van Driefontein naby Piet Retief geleë (in Mkhondo en Dr Pixley Kalsaka Seme Munisipaliteit, Mpumalanga). Die voorgenome aktiwiteit behels die ontwikkeling van 'n ondergrondse myn, waardeur hulle bestaande Maquasa-Oos en -Wes mynboubedryghede uitgebrei sal word.

Ingevolge die relevante omgewingsregulasies, vereis die Omgewingsimpakstudie die volgende magtigings/lisensies alvorens 'n aanvang geneem word:

- **Omgewingsmagtiging** van die Mpumalanga Departement van Ekonomiese Ontwikkeling, Toerisme en Omgewing
- **Watergebruiklisensie** van die Departement van Waterwese
- **Aansoek om mynbouregte** van die Departement van Minerale Hulpbronne
- **Afvalbestuurlisensie** van die Departement van Omgewingsake

**Raak betrokke**

Environmental Resources Management Suider-Afrika (Edms) Bpk (ERM) is die onafhanklike omgewingskonsultant wat die lisensieringsprosesse hierbo gelys, koördineer. Om as 'n Geïnteresseerde & Geëffekteerde Party te registreer en om verdere inligting aangaande die projek te ontvang en aan die proses deel te neem, dien asseblief u besonderhede by die onderstaande kontakpersoon in.

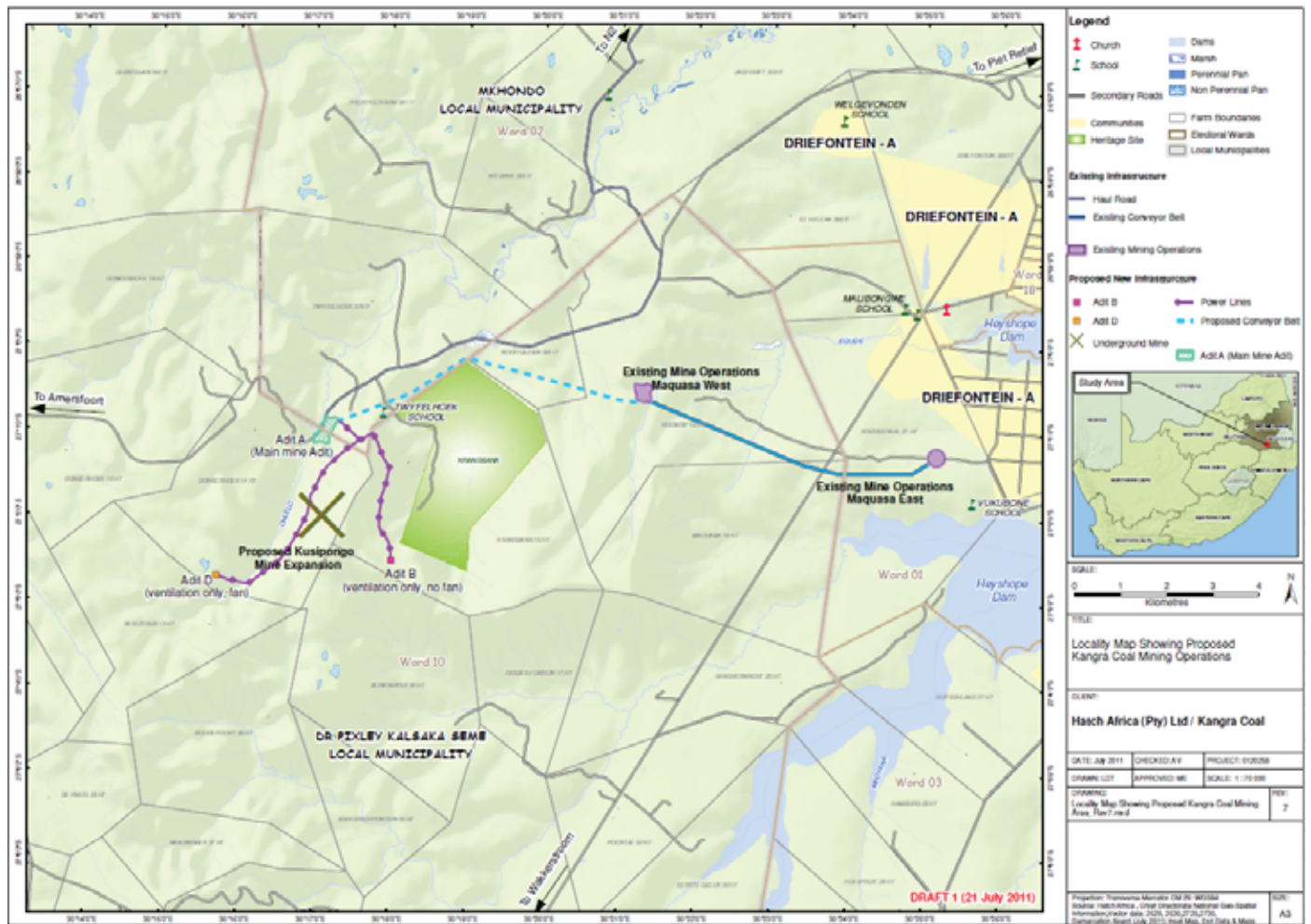
**Nomsa Fulbrook-Bhembe**

011 798 4300 (Tel);

011 804 2899 (Faks); of

Nomsa.fulbrook-bhembe@erm.com

Om te verseker dat u ten volle ingelig word en alle nodige inligting ontvang, registreer asseblief deur Nomsa Fulbrook-Bhembe van ERM teen 26 Augustus 2011 te kontak. Die omgewingsimpakstudie (bestekfase) sal kort daarna begin.



Annex C3.3

## Zulu Site Notice

Ukusikiselwa Kokukhuliswa  
Kweprojekthi ye-Kangra Coal Kusipongo Expansion Project

Kangra Coal (Pty) Ltd. icabangela ukukhulisa umsebenzi wayo wemayini yamalahle e-Savmore Colliery, Mkhondo Nomaspala be-Dr Pixley Kalsaka Seme, e-Mpumalanga Ukuze ihlanganise nengebo yamalahle e-Kusipongo. Isizinda sokukhuliswa okusikiselwayo sitholakala entshonalanga ye-Driefontein eqhele ngebanga elicishe libe amakhilomitha angu-15 eduze nase-Piet Retief. Lomsebenzi osikiselwayo uhlanganisa ukuqaliswa kwemayini yangaphansi komhlaba, ngokwenza kanjalo bandisa imisebenzi yabo ekhona kakade Empumalanga Nasentshonalanga ye-Maquasa.

Ngokuvumelana nemithetho eqondene nemvelo, Nokuhlolwa Kokuthinteka Kwemvelo kudinga imvume/namalayisensi ngaphambi kokuqaliswa:

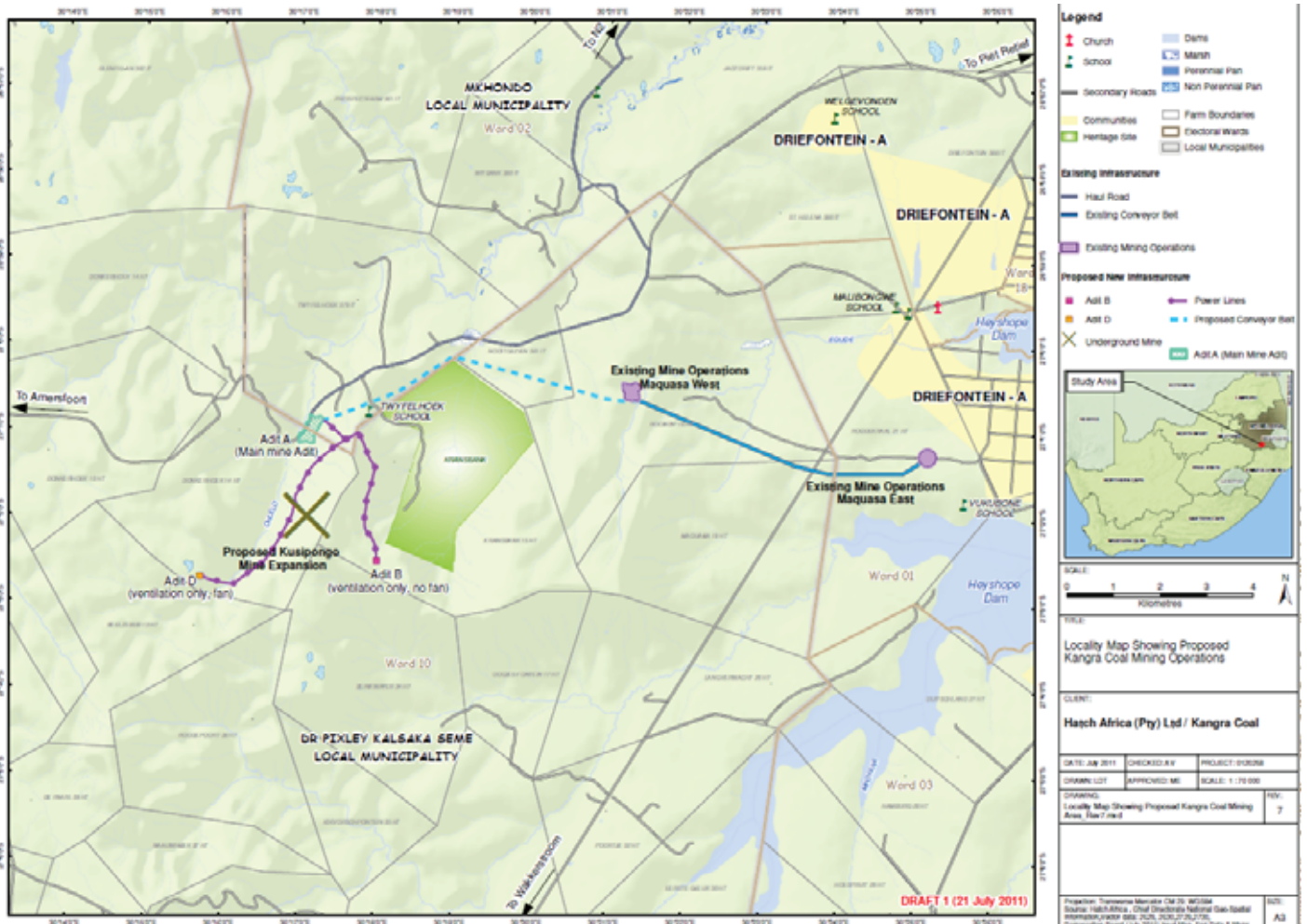
- **Imvume Yendawo** Kusukela Emnyango wase-Mpumalanga Wokuthuthukiswa Kwezomnotho, Ezokuvakasha kanye Nemvelo
- **Ilayisensi Yokusetshenziswa Kwamanzi** Kusukela Emnyango Wezamanzi
- **Isicelo Selungelo Lemayini** Kusukela Emnyango Wezokwembiwa Phansi
- **Ilayisensi Yokukhuculula Ukungcola** Umnyango Wezemvelo

**Yiba Nesandla**

Environmental Resources Management (Pty) Ltd (ERM) umxhumanisi ozimele oqondanisa izinqubo zokubhalisa eziboniswe ngenhla. Ukuze ubhalise Njengeqembu Elinesithakazelo futhi Eliithintekayo, futhi ukuze ukwazi ukuthola ukwaziswa ngeprojekthi futhi ube yingxenywe yenqubo, sicela uthumele imininingwane yakho kumuntu wezokuxhumana ochazwe ngezansi.

Nomsa Fulbrook-Bhembe  
011 798 4300 (Tel);  
011 804 2899 (Fax); noma  
Nomsa.fulbrook-bhembe@erm.com

Ukuqinisekisa ukuthi waziswa ngokugcwele nokuthi uthola konke ukwaziswa sicela ubhalise ngokuthi uxhumane no-Nomsa Fulbrook-Bhembe we-ERM ngaphambi kwezi-26 August 2011. Isigaba Sendima sizobe sesilandela.



Annex C4

Letters to Stakeholders  
notifying them of the  
Project registration process

- *C4.1 – English Letter*
- *C4.2 – Afrikaans Letter*
- *C4.3 – Zulu Letter*

Annex C4.1

English Letter

28 July 2011

Dear Sir/Madam

**Re: Invitation to Register to Become Involved in Public Participation Process Associated with the Proposed Kangra Coal Kusipongo Expansion Project**

*The Project and Process*

Kangra Coal is considering expanding their coal mining operations at the Savmore Colliery to include the Kusipongo coal resource which spans across the Mkhondo and Dr Pixley Kalsaka Seme Local Municipalities in Mpumalanga. This proposed project involves the construction of an underground mine situated westwards of their existing operations at the Savmore Colliery, approximately 15 km west of Driefontein, near Piet Retief in Mpumalanga.

You have been identified as key stakeholder, and as such are invited to become involved in the process.

*Environmental Authorisation and Licensing Processes*

In accordance with the relevant environmental regulations, the proposed expansion requires the following authorisations/licenses prior to commencement:

- **Environmental Authorisation** from Mpumalanga Department of Economic Development, Tourism and Environment
- **Water Use License** from the Department of Water Affairs
- **Mining Right Application** from the Department of Mineral Resources
- **Waste Management License** from the Department of Environmental Affairs

Environmental Resources Management Southern Africa (Pty) Ltd. (ERM) is the independent environmental consultant coordinating the environmental authorisation process and associated licensing processes mentioned above.

**Environmental Resources Management**

*Johannesburg Office*  
Building 32, 1st Floor  
The Woodlands Office Park,  
Woodlands Drive  
Woodmead, 2148  
South Africa  
Tel: +27 (0) 11 798 4300  
Fax: +27 (0) 11 804 2289  
www.erm.com

*Postal Address:*  
Postnet Suite 624  
Private Bag X29  
Gallo Manor, 2052  
Johannesburg  
South Africa



*Registered Company address:*  
Environmental Resources Management  
Southern Africa (Pty) Ltd  
Building 32, 1st Floor,  
The Woodlands Office Park,  
Woodlands Drive  
Woodmead, 2148

*Company registration number*  
2003/001404/07

*Directors*  
Jeremy Soboil (Managing)  
Dylan Campbell  
Grant Bassingthwaighe  
John Alexander (UK)  
John Simonson (UK)

*Offices worldwide*

A member of the  
Environmental Resources  
Management Group



*Public Participation Process*

As part of the processes listed above, ERM is required to engage with key stakeholders, inform them of the proposed project, involve them in the impact assessment and address any comments they may submit.

Prior to initiating the first phase of the Environmental Impact Assessment (EIA), ERM wants to offer stakeholders the opportunity to register as interested and affected parties (RI&AP) and to learn some background information on the proposed project. Please find a background information document attached which provides an overview of the proposed development and detail on the upcoming EIA process. To receive further information on the project, and to participate in the process, please register by submitting your details to the official contact person for the project Nomsa Fulbrook-Bhembe at:

- **Tel:** 011 798 4300;
- **Fax:** 011 804 2899;
- **Email:** [Nomsa.Fulbrook-Bhembe@erm.com](mailto:Nomsa.Fulbrook-Bhembe@erm.com); or
- **Postal:** Postnet Suite 624, Private Bag X29, Gallo Manor 2052

After this initial registration phase has been completed, the first phase of the EIA will begin where a draft Scoping Report will be put into the public domain for your consideration and comment. We will put an advertisement into the Excelsior, Vuka Pixley Ka Seme, Mkhondo News and Recorder newspapers and will also send you correspondence directly to notify you of this.

We look forward to your involvement in the process. Please do not hesitate to contact Nomsa should you have any questions or concerns.

Kind Regards

A handwritten signature in red ink, appearing to be 'AV', with a horizontal line crossing through the middle of the letters.

Andries Venter (ERM Project Manager)

Annex C4.2

## Afrikaans Letter

29 Julie 2011

Geagte Mnr / Mev / Mej

**Insake: Uitnodiging om te Registreer om Betrokke te raak in die  
Openbare Deelnameproses geassosieer met die Voorgenome  
Kangra Coal Kusipongo Uitbreidingsprojek**

*Die Projek en Proses*

Kangra Coal (Edms) Bpk oorweeg dit om hulle steenkoolmynbou-  
bedrywighe by die Savmore Steenkoolmyn uit te brei om die  
Kusipongo steen-koolbron in te sluit. Die voorgenome projek behels  
die konstruksie van 'n ondergrondse myn, geleë ten weste van hulle  
bestaande bedrywighe by die Savmore Steenkoolmyn, ongeveer  
10km wes van Driefontein, naby Piet Retief in Mpumalanga (in al  
twee Mkhondo en Dr Pixley Kalsaka Seme Munisipaliteit).

U is geïdentifiseer as sleutelbelanghebbende, en word as sodanig  
genooi om by die proses betrokke te raak.

*Omgewingsmagtiging en Lisensiëringsproses*

Ingevolge die relevante omgewingsregulasies, vereis die voorgenome  
uitbreiding die volgende magtigings/lisensies alvorens 'n aanvang  
geneem word:

- **Omgewingsmagtiging** van die Mpumalanga Departement van  
Ekonomiese Ontwikkeling, Toerisme en Omgewing
- **Watergebruiklisensie** van die Departement van Waterwese
- **Aansoek om mynbouregte** van die Departement van Minerale  
Hulpbronne
- **Afvalbestuurlisensie** van die Departement van Omgewingsake

Environmental Resources Management Suider-Afrika (Edms) Bpk  
(ERM) is die onafhanklike omgewingskonsultant wat die  
omgewings-magtigingsproses en verwante lisensiëringsprosesse  
hierbo genoem, koördineer.

*Openbare Deelnameproses*

As deel van die prosesse hierbo gelys, word dit van ERM vereis om  
met sleutelbelanghebbendes in gesprek te tree, hulle in te lig oor die  
voorgenome projek, hulle by die impakstudie te betrek en enige  
kommentaar wat hulle mag indien, aan te spreek.

Alvorens die eerste fase van die Omgewingsimpakstudie (OIS)  
geïnisieer word, wil ERM belanghebbendes die geleentheid gun om  
as geïnteresseerde en geïmpakteerde partye (RG&GPe) te registreer en

*Posadres:*  
Postnet Suite 624  
Privaatsak X29  
Gallo Manor, 2052  
Johannesburg  
Suid-Afrika



*Geregistreerde maatskappy-adres:*  
Environmental Resources  
Management  
Suider-Afrika (Edms) Bpk  
Gebou 32, 1ste Vloer  
Woodlandsrylaan  
Woodmead, 2148

*Maatskappyregistrasienumer*  
2003/001404/07

*Direkteure*  
Jeremy Soboi (Bestuur)  
Dylan Campbell  
Grant Bassingthwaight  
John Alexander (VK)  
John Simonson (VK)

*Kantore wêreldwyd*

'n Lid van die Environmental  
Resources Management-groep

om meer agtergrond-inligting oor die voorgename projek te bekom. Hierby aangeheg vind asseblief 'n agtergrond-inligtingsdokument wat 'n oorsig bied van die voorgename ontwikkeling en besonderhede oor die komende OIS-proses. Registreer asseblief om verdere inligting oor die projek te bekom en om aan die proses deel te neem deur u besonderhede aan die amptelike kontakpersoon vir die projek, Nomsa Fulbrook-Bhembe, te voorsien by:

- **Tel:** 011 798 4300;
- **Faks:** 011 804 2899;
- **E-pos:** [Nomsa-Fulbrook-Bhembe@erm.com](mailto:Nomsa-Fulbrook-Bhembe@erm.com); of
- **Posadres:** Postnet Suite 624, Privaatsak X29, Gallo Manor, 2052

Na die aanvanklike registrasiefase voltooi is, sal die eerste fase van die OIS begin, waartydens 'n Konsepbestekverslag aan die publiek beskikbaar gestel sal word vir u oorweging en kommentaar. Ons sal 'n advertensie in die Excelsior, Vuka Pixley Ka Seme, Mkhondo News and Recorder-koerante plaas en u per korrespondensie direk hieroor inlig.

Ons sien uit na u betrokkenheid by die proses. Moet asseblief nie huiwer om met Nomsa in verbinding te tree nie indien u enige vrae of besorgdheid het.

Vriendelike groete



Andries Venter (ERM Projekbestuurder)

Annex C4.3

## Zulu Letter

29 July 2011

Sawubona Nomzane/Nkosazana

**Isi: Isimemo Sokubhalisela Ukuba Ingxenywe Yenqubo Yokuba Nesandla Komphakathi Okuhlobene Nephrojekthi Esikiselwayo Yokukhuliswa kwe-Kangara Coal Kusipongo**

*Iphrojekthi kanye Nenqubo*

I-Kangra Coal icabangela ukukhulisa umsebenzi wayo wemayini yamalahle e-Savmore Colliery ukuhlunganisa ingcebo yamalahle ase-Kusipongo. Iphrojekthi esikiselwe ihlanganiswa ukwakhiwa kwemayini yangaphansi komhlaba ezobe ingasentshonalanga kwemisebenzi yabo ekhona kakade e-Savmore Colliery, ecishe ibe ngamakhilomitha angu-15 ngasentshonalanga ye-Driefontein, eduze nase-Piet Retief e-Mpumalanga (Mkhondo Nomasipala be-Dr Pixley Kalsaka Seme).

Ubonakale njengobamba iqhaza ovelele, ngenxa yalokho uyamenywa ukuba ube nengxenywe kwinqubo.

*Ukugunyazwa kwezemvelo kanye Nezinqubo Zokulayisensa*

Ngokuvumelana nemithetho eqondene nendawo, ukukhuliswa okusikiselwe kudinga imvume/amalaysensi alandelayo ngaphambi kokuqaliswa:

- **Ukugunyazwa Kwezemvelo** kusukela Emnyango Wase-Mpulanga Wokuthuthukiswa Kwezomnotho, Ezokuvakasha kanye Nezemvelo
- **Ilayisensi Yokusetshenziswa Kwamanzi** Kusukela Emnyango Wezamanzi
- **Isicelo Selungelo Lemayini** kusukela Emnyango Wezokwembiwa Phansi
- **Ilayisensi Yokukhuculula Ukungcola** kusukela Emnyango Wezemvelo

Environmental Resources Management Southern Africa (Pty) Ltd. (ERM) umxhumanisi ozimele oqondanisa inqubo yokugunyaza ezemvelo kanye nezinqubo ezihlobene nokulayisenswa ezichazwe ngenhla.

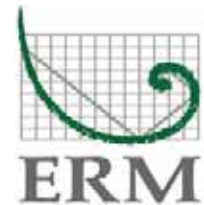
*Inqubo Yokuba Nesandla Komphakathi*

Njengengxenywe yezinqubo ezichazwe ngenhla, i-ERM kumele izihlanganise nabaneqhaza abavelele, ibazise njephrojekthi esikiselwe, izihlanganise nokuhlola kokuthinteka futhi bethule noma yikuphi ukuphawula engase ikulethe.

**Ukuphathwa  
Kwencebo  
Yezemvelo**

*Ihhovisi lase-Johannesburg*  
Isakhiwo 32, 1st Floor  
The Woodlands Office Park,  
Woodlands Drive  
Woodmead, 2148  
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Johannesburg  
Iningizimu Afrika



*Ikheli Elibhalisiwe Lenkampani:*  
Ukuphathwa Kwencebo  
Yezemvelo  
Ningizimu Afrika (Pty) Ltd  
Isakhiwo 32, 1st Floor,  
The Woodlands Office Park, Woodlands  
Drive  
Woodmead, 2148

*Inombolo Yokubhaliswa Kwenkampani*  
2003 001404 07

*Abaqondisi*  
Jeremy Soboil (Umphathi)  
Dylan Campbell  
Grant Bassingthwaighte  
John Alexander (UK)  
John Simonson (UK)

*Amahhovisi Emhlabeni Jikelele*

Ilungu  
Leqembu Lokuphathwa Kwencebo  
Yezemvelo

Ngaphambi kokuqalisa isigaba sokuqala Sokuhlolwa Kokuthinteka Kwemvelo (EIA), i-ERM ifuna ukunikeza abeneqhaza elivelele ithuba lokubhalisa njengamalungu anesithakazelo futhi athintekayo (RI&AP), futhi nokufunda eminye iminingwane yangemuva kwiphrojekthi esikiselwe. Sicela uthole umqulu wemininingwane onamathiselwe onikeza uhlojojikelele lwentuthuko esikiselwe kanye neminingwane kwinqubo ezayo ye-EIA. Ukuthola ukwaziswa okwengeziwe mayelana nephrojekthi, kanye nokuba nesandla kwinqubo, sicela ubhalise ngokuthumela imininingwane yakho kumuntu wokuthintana naye ofanele wephrojekthi ye-Fullbrook-Bhembe:

- **Tel:** 011 798 4300
- **Fax:** 011 804 2899
- **Imeyli:** [Nomsa.Fulbrook-Bhembe@erm.com](mailto:Nomsa.Fulbrook-Bhembe@erm.com); noma
- **Ikheli:** Postnet Suite 624, Private Bag X12, Gallo Manor, 2052

Emva kokuba lesi sigaba esiqalayo sesiphelile, isigaba sokuqala se-EIA sizoqala lapho Umbiko Wendima ongaphelele ubekwa kwisizinda somphakathi ukuze usicabangele futhi uphawule. Sizofaka isikhangiso kumaphaphendaba e-Excelsior, i-Vuka Pixeley Ka Seme, i-Mkhondo News kanye ne-Recorder futhi sizokuthumela okwengeziwe ukuze sikwazise ngalokhu.

Sibheke phambili ekuzibandakanyeni kwakho kule nqubo. Sicela ungapholisi amaseko ukuxhumana no-Nomsa uma kwenzeka uba nanoma iyiphi imibuzo noma izikhalo.

Ozithobayo



Andries Venter (Umpathi Wephrojekthi ye-ERM)



Annex C5

## Postponement Letters

- *C5.1 – English Letter*
- *C5.2 – Afrikaans Letter*

Annex C5.1

## English Letters

15 December 2011

Dear Sir/Madam,

**ENVIRONMENTAL IMPACT ASSESSMENT FOR PROPOSED KANGRA  
COAL KUSIPONGO RESOURCE EXPANSION PROJECT NEAR  
DRIEFONTEIN, MPUMALANGA**

Our sincere thanks to all those stakeholders who have provided comments and suggestions during the initial consultation phase in July and August 2011. This letter serves as an update of the Project progress and the anticipated activities going forward into year 2012. It was envisaged that the Draft Scoping Report (DSR) associated with the above mentioned application would be made available for public comment by the end of 2011; however, due to delays associated with various aspects of the engineering design, the DSR will only be available for public comment early in 2012.

**Anticipated next steps**

We anticipate that the DSR will be made available for public comment early in 2012 and stakeholders will be invited to attend a public meeting at this time where contents of the DSR will be discussed.

We appreciate your patience and look forward to your further participation in the EIA process. Should you have any questions, need more information or wish to provide comments, please contact Nomsa Fulbrook-Bhembe at:

- Tel: (011) 798 4300
- Fax: (011) 804 2899
- Email: [Nomsa.fulbrookbhembe@erm.com](mailto:Nomsa.fulbrookbhembe@erm.com)

Kind Regards,



Dieter Rodewald  
Project Manager

**Environmental  
Resources  
Management**

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Southern Africa (Pty) Ltd  
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Woodlands Drive  
Woodmead, 2148

*Company registration number*  
2003/001404/07

*Directors*  
Jeremy Soboil (Managing)  
Dylan Campbell  
Grant Bassingthwaight  
John Alexander (UK)  
John Simonson (UK)

*Offices worldwide*

A member of the  
Environmental Resources  
Management Group

Annex C5.2

## Afrikaans Letter

20 Desember 2011

Geagte Mnr/Mev/Mej,

**OMGEWINGS IMPAK STUDIE VIR DIE VOORGESTELDE KANGRA  
COAL KUSIPONGO HULPBRON UITBREIDINGSPROJEK NABY  
DRIEFONTEIN, MPUMALANGA**

Ons opregte dank aan al die belanghebbendes wat insette en voorstelle gelewer het tydens die oorspronklike konsultasiefase in Augustus 2011. Hierdie brief dien as terugvoer van die projek se vordering en die verwagte aktiwiteite wat volg in 2012. Dit was voorsien dat die konsep omvangsverslag (KOV) wat betrekking hou met die projek beskikbaar sou wees teen die einde van 2011, maar a.g.v. vertraging in verskeie ingenieursontwerpe, sal die KOV eers beskikbaar wees vir publieke kommentaar vroeg in 2012.

**Verwagte volgende stappe**

Ons verwag dat die KOV beskikbaar gemaak sal word vir publieke kommentaar vroeg in 2012 en dat belanghebbendes uitgenooi sal word om 'n publieke vergadering by te woon om die KOV inhoud te bespreek.

Ons waardeer u geduld en sien uit na u voortgesette deelname in die omgewings impak studie proses. Sou u enige vrae hê, benodig meer inligting of wou kommentaar lewer, skakel asseblief Nomsa Fulbrook-Bhembe by:

- Tel: (011) 798 4300
- Faks: (011) 804 2899
- E-pos: Nomsa.fulbrookbhembe@erm.com

Vriendelike Groete,



Dieter Rodewald  
Projekbestuurder

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*Offices worldwide*

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Environmental Resources  
Management Group

Annex D

## Stakeholder Database

## Proposed Kangra Coal Kusipongo Resource Expansion Project, Mpumalanga Province

NAME	SURNAME	INSTITUTION
Altus	Lotter	Mpumalanga Department of Economic, Development, Tourism and Environment
Andre	Steenkamp	Birdlife South Africa: Wakkerstroom
Andre	Beetge	Expertise in wetlands rehabilitation
Angus	Burns	WWF with an interest in Wakkerstroom
Anne C	Dique	S A V F Piet Retief - Economic, Social and Community Development organisation
AT	Thwala	Mkhondo local municipality
BH	Mtshali	Mkhondo local municipality
Bhekinkosi	Mndawe	Mpumalanga Department of Economic, Development, Tourism and Environment
BJ	Mngomezulu	Vukuzithathe Old Age Club
Brent	Corcoran	WWF with an interest in Wakkerstroom
Bruce	Treble	Interested & Affected Party
Cabisile Cathrine Anna	Kubheke	Zenzele Day Care Centre
Carolyn	Ah Shene-Verdoorn	BirdLife South Africa
CF	Herbst	Christelik-Maatskaplike Raad: Volksrust
CJF	Greyling	Owner of Donkerhoek 14 HT (Portion 22 & possibly 2)
Charles Kgeale.	Bafana Malunga	Human Rights Commission
CL	Greyling	Owner of Roodeport, Blinkwater, Naauwhoek and Kikvorschfontein
CM	Dlamini	Embhuleni Traditional Council
Danny	Leahy	Interested & Affected Party
Doctor	Yende	Owner of Twyfelhoek 379 IT ( Portion 2 and 3)
Ellen	Dladla	Thandanani Home Based Care
Elton	Greeve	Department of Rural Development and Land Reform (DRDLR)
Enoch	Khumalo	Owner of Jagdrift
Erick	Sambo	Mpumalanga Department of Economic, Development, Tourism and Environment
Etian	Terblanche	SANRAL
F	Mntambo	Department of Water Affairs (DWA) Mpumalanga
Fanyana	Mazibuko	Dr Pixley Kalsaka Seme
FD	Masele	National African Farmers' Union (NAFU)
Feroze	Shaik	Department of Education
Francois	Roux	Interested & Affected Party
Funfun	Harry	Tholusizo Home Based Care - Prevention and education about HIV/Aids
Garth	Bachelor	Mpumalanga Department of Economic, Development, Tourism and Environment
Gavin	Cowden	Mpumalanga Department of Economic, Development, Tourism and Environment
George	Motha	Community Member
George	Xaba	Gert Sibande District Municipality
Gerty	Venter	Piet Retief Farmers Association
Gezile	Mthethwa	Mkhondo Local Aids Council
Glenda	Moloi	Department of Mineral Resources
Goodness N	Kunene	SANTA- Sakhisizwe Branch
Greydon	Payne	Community Member
Gudrun	Loubser	Interested & Affected Party
H	Hoeksman	S A V F Volksrust
Hannes	Marais	Mpumalanga Tourism and Parks Agency
Hans	Wischhausen	Wakkerstroom Tourism
Hennie	Laas	Mpumalanga Landbou/Agriculture
Hohn	Woesas	Community Member
Inkosi	Malaza	Mandlamakhulu Traditional Council
Inkosi	JM Nkosi	Somcuba Bhevula Traditional Council
Inkosi	RA Nkosi	Enikwakuyengwa Traditional Council
Inkosi	Nlapho	Mpsikazi Traditional Council
Inkosi	Tp Nkosi	Ebutsini Traditional Council
Inkosi	Tshabalala	Madlangampisi Traditional Council



Inkosi	Mnisi	Duma Traditional Council
Inkosi	Hlatshwako	Emfumbeni Traditional Council
Inkosi	Tm Nkosi	Ndlela Traditional Council
Inkosi	Msibi	Enkhaba Traditional Council
Inkosi	Mnisi	Mantjolo Traditional Council
Inkosi	Mthetwa	Madabukela Traditional Council
Isaiah	Mabele Mayesela	Community Member
Jakobus	Botha	Mkhondo Environmental Protection Agency
John	Foster	Community Member
John	Khumalo	Yende Community Contact Person
John	Bond	Interested & Affected Party
JR	Abrahamse	J-Life Ministries - Religious Congregations and Associations
Khanyisile	Masondo	Mkhondo local municipality
Kim	Webb	Wildlife & Environmental Society of South Africa
Leon	Grove	Dr Pixley Kalsaka Seme
Lesia	Nhlenyeniwa	Mkhondo local municipality
Lizette	Botha	Mkhondo Environmental Protection Agency
LN	Swart	Piet Retief Dienssentrum - Social Services, Services for the elderly, Organisations providing geriatric care
Louis	Botha	Mkhondo Environmental Protection Agency
Louis	Botha	MEPA (Mkhondo Environmental Protection Association)
Lucky	Dube	Gert Sibande District Municipality
Lungile	Setlogelo	Mpumalanga Dept. Human Settlements
Lynette	Van Damme	South African Heritage Resources Agency (SAHRA)
M	Mnisi	Mpumalanga Dept. Co-operative Governance and Traditional Affairs
MA	Sangweni	Xoshindlala Project
Margaret	Khoza	Department of Energy
Mathew	Mohlasedi	Mpumalanga Dept. Public Works, Roads and Transport
Matjelele	Phaladi	National Department of Environmental Affairs
MD	Mahlalela	Gert Sibande District Municipality
ML	Phakathi	Masibumbane Traditional Healers
MP	Mkhize	Sisonke Environmental Club
Mthembeni	Jeje	Mkhondo local municipality
Muzi	Mthethwa	Community Member
Nchedi	Maphokga-Moripe	Department of Water Affairs (DWA)
Nchedi	Maphokga-Moripe	Department of Environmental Affairs
Nelisiwe	Sithole	Mpumalanga Dept. Agriculture, Rural Development and Land Administration
Ngelosi	Ndhlovu	Mkhondo local municipality
NL	Bosman	Agri Mpumalanga
Nocawe	Mthombothi	Mpumalanga Department of Economic, Development, Tourism and Environment
NP	Ngobese	Bhekisizwe Home Based Care
Nyeleti	Makhubela	Department of Public Works
O	Filter	Mkhondo Alathia Rehabilitation Centre
Oliver	Stroink	Interested & Affected Party
Oupa Sibeko	Mavuso	Department of Urban & Economic Development
P	Malatsi	Dept of Co-operative Governance and Traditional Affairs
P	Msimango	Simunye Ntombe Community Organisation
Pamela	Vilakazi	Mkhondo local municipality
Patrick	Khumalo	Gert Sibande District Municipality
Paula	Leahy	Interested & Affected Party
Paulos Jabulani	Nhleko	Owner of Kransbank 15 HT (Portion 2 and possibly Re)
Peace	Mqadi	Department of Health
Peter	Moloi	Tribal Authority Council
Peti Irene	Nkosi	Interested & Affected Party
Phagamile		Dr Pixley Kalsaka Seme
PV	Nkabinde	Thuthukani Stimulation Centre - services for the handicapped
Ramke	Glen	Endangered Wildlife Trust Crane Working Group
RAP	Van Niekerk	Christeliek-Maatskaplike Raad van Piet Retief - Economic, Social and Community Development, Community and neighbourhood organisations

Richard	Hlatsbuayo	Owner of Kransbank 15 HT (Portion 2 and possibly Re)
Roland	Stone	Interested & Affected Party
Rupert	Lawlor	Wakkerstroom Natural Heritage Association
S	Motha	Dr Pixley Kalsaka Seme
Sam	Ngwenya	Dr Pixley Kalsaka Seme
Shadrak	Ngema	Ngema Trust
Sibongile	Mathacha	Mkhondo local municipality
Sibusiso	Mabaso	Dr Pixley Kalsaka Seme
Simangaliso	Mthembu	Interested & Affected Party
Sipho	Mkhatshwa	Department of Urban & Economic Development
Sipho	Shabalala	Dr Pixley Kalsaka Seme
Sirman	Umahlinza	Council
Solomon	Dhlongolo	Owner of Kransbank 15 HT (Portion 2 and possibly Re)
Sphiwe	Senyivango	Owner of Kransbank 15 HT (Portion 2 and possibly Re)
Steve	Galane	Department of Agriculture, Forestry & Fisheries
Steven	Cindi	Mkhondo local municipality
Teboho	Klonderboy	Interested & Affected Party
Themba	Maisela	Owner of Kransbank 15 HT (Portion 2 and possibly Re)
TR	Yende	Sinothando Community Health Workers
Ursula	Franke	Endangered Wildlife Trust
Valerie	Du Plessis	Department of Water Affairs
VD	Nkosi	Mkhondo local municipality
Vusanani	Dlamini	Mpumalanga Department of Economic, Development, Tourism and Environment
Vusiwe	Dube	Mkhondo local municipality
Wendy	Mahlangu	Mkhondo local municipality
Willem	Linda	Owner of Twyfelhoek 379 IT (Re)
William	Ngema	Ngema Trust
WJM	Mngomezulu	Dr Pixley Kalsaka Seme
WJM	Mngomezulu	Dr Pixley Kalsaka Seme
WW	Stapelberg	Mpumalanga Welfare Social Service and Development Forum
Yasmeen	Ally	Mpumalanga Office of the Premier
ZH	Luhlanga	Dr Pixley Kalsaka Seme
	Tshepo	Owner of Kransbank 15 HT (Portion 2 and possibly Re)
	Snathi	Owner of Prospect 1
	Mthokozeni	Owner of Prospect 2
	Mnisi	Owner of Witbank
	Ukuchuma Farming Pty Ltd	Owner of Donkerhoek HT 14 (portion 4 and 9)
	Ngovolo	Rooikop Committee
	Unonguloza	Community Member
	Mgugulu	Community Member
	Stinkolo	Community Member
	Diank	Community Member
	Skieper	Community Member
	Chirigo	Community Member
	Sibiya	Community Member
	Mndebele	Dr Pixley Kalsaka Seme
	Sibanyoni	Mkhondo local municipality
	Nkosi	Mkhondo local municipality
	Yende	Mkhondo local municipality
	Fengwayo	Gert Sibande District Municipality
		Mpumalanga Dept. of Energy
	Moloi	Lekgoetla Traditional Council
	Robson	Ngema Trust
	Nkosi	Thandolwethu Community Home Based Care
	Ngema	Owns community hall in Dirkiesdorp
		Wildlife & Environmental Society of South Africa
		Escarpment Environmental Protection Group

Annex E

## Stakeholder Meeting Minutes

Meeting  
minutes

**Environmental  
Resources  
Management**

*Subject/Ref* Minutes of meeting with Dr Pixley Kalsaka Seme  
Local Municipality  
*Venue* Dr Pixley Kalsaka Seme Local Municipality – Council  
Chambers  
*Date of Meeting* 20 July 2011  
*Present* As per the table below

*Johannesburg Office*  
Building 32, 1st Floor  
The Woodlands Office Park,  
Woodlands Drive  
Woodmead, 2148  
South Africa

Tel: +27 (0) 11 798 4300  
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www.erm.com

*Postal Address:*  
Postnet Suite 624

*Distribution* All in attendance; Councillors for Ward 10; Internal  
ERM team; Kangra Coal representatives



*Date* 16 August 2011

---

Private Bag X29  
Gallo Manor, 2052  
Johannesburg  
South Africa

This note serves as the record of the meeting with Dr Pixley Kalsaka Seme Municipality on 21 July 2011. The objective of the meeting was to discuss the proposed Kangra Coal Mine Expansion into the Kusipongo Resource. Table 1 below indicates who attended the meeting.

Name & Surname	Organisation	Position
Oupa D KA Sibeko Mavuso	Department of Urban and Economic Development	Director of Urban and Economic Development
Munira Omarjee	Dr Pixley Kalsaka Seme Local Municipality	Dr Pixley Kalsaka Seme Local Municipality Secretary
Sipho Shabalala	Dr Pixley Kalsaka Seme Local Municipality	Manager for the Officer of the Speaker - Dr Pixley Kalsaka Seme Local Municipality
Cllr ZH Luhlanga	Dr Pixley Kalsaka Seme Local Municipality	Honourable Speaker - Dr Pixley Kalsaka Seme Local Municipality
Peter Moloji	Tribal Authority Council	Representative of the Tribal Authority Council on behalf of Chief Moloji
King S Nkambule	Kangra Coal	Transformation Manager
Sipho Mkhathswa	Department of Urban and Economic Development – Local Economic Development	Local Economic Development Manager
Fanyana Mazibuko	Dr Pixley Kalsaka Seme Local Municipality	Ward Councillor 6 - Dr Pixley Kalsaka Seme Local Municipality
Nomsa Fulbrook-Bhembe	ERM	Consultant
Jimmy Mnisi	Di-Idea	Facilitator
Lisa van Dongen	ERM	Consultant

Prior to initiation of the meeting formal apologies were given on behalf of the Dr Pixley Kalsaka Seme's Municipal Manager and Executive Mayor as they were not able to attend the meeting. Apologies were also given on behalf of Chief Moloji who also was not able to attend.

Lisa van Dongen of ERM gave a presentation introducing the proposed Project, the associated licensing processes and the proposed plan for the upcoming public participation process (PPP).

## KEY OUTCOMES OF THE MEETING

## ACTION OR OBSERVATIONS

### *A1.1 RESPONSES TO THE PRESENTATION ON THE PROPOSED PROJECT*

The following key questions were raised after the introduction to the project:

- The Speaker raised the question about the approximate distance from the existing mine to the proposed mine. He also enquired whether mining activities would continue at the existing mine.
  - ERM responded that an approximate distance would be 7km. Furthermore it was explained that the existing mine would slowly close but that the proposed mine would serve to transfer the employees from the existing mine to the proposed mine.
- Peter Moloi asked how Dr Pixley Kalsaka Seme would be affected by the proposed mine, where the existing map did not clearly show where the municipal boundary fell.
  - An explanation was provided as to how Dr Pixley Kalsaka Seme would be affected in terms of the properties that would be affected by the Project. It was agreed that the local municipality boundaries would be added to the map to illustrate this clearly.

### *A1.2 RESPONSES TO THE PRESENTATION ON THE LICENSING PROCESSES*

The following responses were made to the presentation on the licensing processes:

- The licensing processes, in addition to the responsible authorities, that are required for the project were identified by ERM. It was clearly identified that these processes will be run in an integrated manner.
- In addition the need to potentially to discuss access to land was raised. It was emphasised that these negotiations will occur separately from the public participation and Environmental and Social Impact Assessment (ESIA) process and the scope of work currently identified. In addition it was emphasised that any commitments in this regards cannot be made at this stage.

ERM requested input into the proposed Public Participation Process (PPP) and further asked the municipality to advise on which stakeholders should be targeted for inclusion into the public participation process. The following responses were made:

- It was agreed that the stakeholder groups identified, and the means of communication are relevant for this project.

### A1.3 RESPONSES TO PRESENTATION ON PROPOSED PPP PROCESS

- It was also identified that the key Wards to be involved in this process are Wards 5 and 10 (it was later identified that Ward 5 was related to the Wakkerstroom town and that the only directly affected ward was Ward 10). It was also agreed that the Councillors from these Wards would be given the material from the presentation, and would be fully informed of the project and process.
- Peter Moloi also requested for the public participation materials to be sent directly to Chief Moloi. (Note: By telephone later, a follow up meeting was requested between ERM and the traditional authority).  
  
\*Note: Concerns around gate keeping from the Traditional Authority (intimation that there might be contest of Traditional leadership)
- It was recommended that there was a need to make direct contact with farmer owners, rather than to rely on the public notification process. Similarly, for affected communities it was noted that the distribution of flyers would not be sufficient and that these would need to be augmented with face-to-face engagement to ensure full understanding.
- The three languages identified (Zulu, English and Afrikaans) were identified as being the appropriate languages for the targeted stakeholders.
- The current stakeholder database for Dr Pixley Kalsaka Seme from their IDP processes was provided to ERM when the meeting was adjourned; however, it was agreed that research about unions would need to be conducted by ERM.  
  
Action: research to be conducted on relevant Unions, as well as social NGOs and CBOs in the area
- In response to a question about appropriate publications the Director of Urban and Economic Development identified that the Excelsior and Vuka Pixley newspaper were appropriate. The Highvelder newspaper was identified as not being a relevant newspaper for the project, given that it was distributed in Ermelo area.
- Venues to display the materials were identified. It was suggested that Volksrust, Wakkerstroom and Dirkiesorp be the main towns to display materials. Key locations were identified as the Post Office, Library and Municipal Offices. Daggakraal was also suggested as an appropriate place to display materials, given that this was where the Traditional Authority was based. It was also suggested that the Project could make use of the schools in the surrounding farms for venues for documents and meetings.
- Potential venues for public meetings were also discussed with the abovementioned towns being suggested. Lisa van Dongen noted that the proposal was not to have road show of meetings in different towns but rather to convene one integrated meeting so all interests would be exposed to one another. The value of such an integrated meeting was acknowledged. It was, however, recommended that transportation be provided to stakeholders for the public meeting.  
  
Action: Identify potential venue/s to convene public meeting. To be discussed internally followed by external discussion with key
- It was suggested that direct contact be initiated with affected communities when information with regards to the project is disseminated.
- It was suggested that the relevant Ward Councillor (or member of Dr Pixley



Kalsaka Seme Local Municipality) attend meetings with ERM when these stakeholders were undertaken in the communities, for example the public meetings.

- oERM noted their support of the idea of the Councillors attending the public meetings.

- The Speaker raised the question as to how this proposed project will benefit their community, not only from an employment perspective but also in terms of sustainable development and investment in the area. Furthermore, it was suggested that there was a need for the municipality as an institution to be considered as a beneficiary.

- oKangra Coal responded that their Social and Labour Plan will aim to answer this.

- oERM also pointed out that the PPP is an excellent opportunity for relationship building between the municipality and Kangra Coal.

Action: ERM to provide Scoping Report directly to Oupa Mavuso

- The Director of Urban and Economic Development suggested that the draft Scoping Report should be sent to the Director of Planning and Economic Development. He then took responsibility for championing this internally, by summarising the key aspects of the Project for Council. This provides a means of stakeholders comprehensively understanding the key findings of the Scoping Phase.

- oERM endorsed this and thanked the Director for his willingness to be involved in this way. It was broadly agreed that this should complement and not replace a broad distribution of materials to anyone in the municipality who would be interested in receiving these.

- The general question was raised about whether the municipality will be able to comment during the PPP.

- oIt was confirmed that the municipality was considered one of the key stakeholders in the process and that ERM would welcome them to comment on the proposed project as well as the associated processes. This could be at any point in the process, but particularly in response to the release of the draft Scoping and draft Environmental Impact Reports, which would be tabled for comment and review.

- oFurthermore, Lisa van Dongen stressed upon them the importance of their considering the technical proposal in a neutral way so as support ERM conduct a balanced impact assessment was possible. She noted that ERM would be relying on the municipality to help identify all the potential impacts of the proposed project, and encourage stakeholders to put forward their concerns and opinions.

#### *A1.4 IDENTIFICATION OF CONTACT PERSON FOR ESIA APPLICATION*

It was agreed that the official contact person for Dr Pixley Kalsaka Seme would be Mr Oupa Mavuso – Director of Urban and Economic Development.

In addition for future correspondence with the municipality, it was requested that all correspondence continue to be sent to the Executive Mayor, the Officer of the Speaker and the Municipal Manager for them to distribute internally as appropriate.

#### *A1.5 ADDITIONAL & CLOSING COMMENTS*

- It was stressed by Mr Oupa Mavuso that consideration should already be taken of mine closure and rehabilitation.
- It was highlighted that concerns will most likely be raised with regards to NO<sub>x</sub> and SO<sub>x</sub> emissions, soil rehabilitation and impact on water resources. It is therefore essential that answers will be made available with scientific backing. He noted that he would take responsibility for ensuring the technocrats in the municipality provide technical input and review of such matters.
- It was noted that the municipality's name was changed from Pixley Ke Seme Local Municipality to Doctor Pixley Kalsaka Seme Local Municipality. All materials should reflect the new name.

Finally the municipality thanked Kangra Coal and ERM for coming to involve them early in the process. They expressed their confidence that this process would be undertaken in an appropriate manner going forward.

*Subject/Ref* Minutes of meeting with CFJ Greyling

*Venue* Wakkerstroom

*Date of Meeting* 21 July 2011

*Present* Mr CJF Greyling, Mr Greyling Senior (father), Nomsa Fulbrook-Bhembe, Jimmy Mnisi, Lisa van Dongen

*Distribution* Internal ERM Team; Hatch; Kangra Coal

*Date* 16 August 2011

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Environmental  
Resources  
Management



## KEY OUTCOMES OF THE MEETING

## ACTION OR OBSERVATIONS

### *A1.6 BACKGROUND:*

Mr CFJ Greyling was identified at the beginning of the Public Participation Process (PPP) as the owner of Donkerhoek 14 HT. Mr CFJ Greyling has had previous engagement with ERM (the Water Specialists), and thus was aware of ERM. The meeting served as an introduction to ERM's Public Participation team and to follow up on Mr CFJ Greyling's concerns that he had raised previously.

### *A1.7 COMMENTS AND INPUTS: WATER USE IMPACTS*

Mr CJF Greyling's current use of water (particularly for watering his livestock) is via springs. Mr Greyling stated that the first 100 (approximately) exploration holes drilled by Kangra Coal were not filled properly. Consequently he is concerned the holes will 'drain the water table', and cause depletion of water resources.

He also voiced concern over the short and long term impacts: depletion of water resources and the overall impacts on water resources.

#### *A1.8 COMMENTS AND INPUTS: MINING RELATED ACTIVITIES*

Mr CFJ Greyling queried why the shaft and surface infrastructure located at Adit A cannot be located on the Kransbank farm.

Mr CFJ Greyling would like confirmation on the exact locations of the mining activities – he thinks mining will be done on either side of Adit A, thus confirmation is required on the exact location and extent of the mining at Adit A.

Mr Greyling Senior (father) also queried the depth of the proposed mining as well as the thickness of the layers to be mined.

Mr CFJ Greyling would like confirmation or evidence that the underground mine will have no effect on any of his surface infrastructure (house etc.) or people living on top of the land.

Mr CFJ Greyling also queried the type of coal to be mined.

#### *A1.9 COMMENTS AND INPUTS: AIR IMPACTS*

Mr CFJ Greyling noted that the dust resulting from the proposed activities at Adit A will directly affect his land for grazing leaving it unsuitable for such activities.

In addition Mr CFJ Greyling noted westward winds will also leave Mr CL Greyling's (Mr CFJ Greyling's uncle) land unsuitable for grazing. It will also impact upon the properties south of Adit A.

#### *A1.10 COMMENTS AND INPUTS: ENGAGEMENT WITH KANGRA COAL*

He noted that he has only met Kangra Coal's contractors to date. He would like to meet the management of Kangra Coal – this is particularly important as they have already started drilling on his land.

Mr CFJ Greyling would like to speak to Kangra Coal about compensation for the use of his land.

Mr CFJ Greyling would also like a guarantee and plan, provided by Kangra Coal; outlining how they will deal with potential draining of water from his farm – in the instance that he no longer has access to water will water be supplied to him?

#### *A1.11 COMMENTS AND INPUTS: ADDITIONAL*

Mr CFJ Greyling requested that the detailed findings of the hydrological survey be sent to him before they are put in a report and disclosed to the public. This includes providing him details on all of the relevant springs. He requested for this to happen so that he would have time to process and understand the results of the report.

*A1.12 PROCESS CONSIDERATIONS:*

Mr CFJ Greyling is aware of previous EIA processes that have been conducted in the area for mining related projects, and hence this should be taken into account. More importantly Mr CFJ Greyling raised some important points about his expectations on engagement particularly with Kangra Coal.

This needs to be taken into account by ERM when conducting the PPP and while working at the interface between Kangra Coal and persons like Mr CFJ Greyling.

Meeting  
minutes

*Subject/Ref* Minutes of meeting with Mkhondo Local  
Municipality

*Venue* Mkhondo Local Municipality – Council Chambers

*Date of Meeting* 21 July 2011

*Present* As listed in the table below

*Distribution* All in attendance; Councillors for Ward 2; Internal  
ERM team; Hatch team; Kangra Coal representatives

*Date* 16 August 2011

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Environmental  
Resources  
Management



This note serves as the record of the meeting with Mkhondo Municipality on 21 July 2011. The objective of the meeting was to discuss the proposed Kangra Coal Mine Expansion into the Kusipongo resource. Table 1 below indicates who attended the meeting.

*Table.1 Attendees at the Public Participation Meeting*

<b>Name &amp; Surname</b>	<b>Position</b>
Shadrak Ngema	Member of Ngema
William Ngema	Communications – Ngema
Robson Ngema	Chairperson – Ngema
King Solomon Nkambule	Kangra Coal
Sibongile Mathacha	Ward Councillor – Ward 3
Lesia Nhlenyetiwa	PR Ward Councillor – Ward 3
Khanyisile Masondo	Ward Councillor – Ward 15
Ngelosi Ndhlovu	Member of the Mayoral Committee: Mkhondo Local Municipality
BH Mtshali	Executive Mayor Mkhondo Local Municipality
VD Nkosi	Member of the Mayoral Committee Mkhondo Local Municipality
AT Thwala	Ward Councillor – Ward 1
Inkosi Mthetwa	Representative of Madabukela Traditional Council
Nomsa Fulbrook-Bhembe	Consultant ERM
Jimmy Mnisi	Facilitator Di-Idea Communications
Lisa van Dongen	Senior Consultant ERM

Lisa van Dongen of ERM gave a presentation introducing the proposed project, the associated licensing processes and the proposed plan for the upcoming public participation process (PPP). The map of the proposed mining site was provided to all attendees together with a hard copy of the presentation.



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**KEY OUTCOMES OF THE MEETING**

**ACTION OR  
OBSERVATIONS**

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*A1.13 RESPONSES TO THE PRESENTATION ON THE  
PROPOSED PROJECT*

The following key questions were raised after the introduction to the project:

- Councillor VD Nkosi (MMC) raised the question about the potential for job creation and the number of jobs that would be created.
  - King Solomon Nkambule from Kangra Coal responded indicating that an approximate 750 existing jobs would be saved through this proposed intervention. In addition to this it was estimated that an additional 300 jobs would be created as a result of the proposed project.
  - ERM noted that these would not be created for several years, where the licensing processes were anticipated to go on for about 2 years, followed by planning and construction phases.
- A general concern was raised about the potential negative impacts of the proposed mine. Specific current negative impacts that were identified with the existing mine were identified including the increased number of trucks on the road related to the mine and the associated increase in fatalities. Lisa van Dongen thanked them for raising these concerns. She also stressed the important role the municipality had in ensuring a balanced impact assessment was possible, where all stakeholder concerns are captured.

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**KEY OUTCOMES OF THE MEETING**

**ACTION OR  
OBSERVATIONS**

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*A1.14 RESPONSES TO THE PRESENTATION ON THE  
LICENSING PROCESSES:*

The following responses were made to the presentation on the licensing processes:

- Mayor BH Mtshali raised the question about how many people would potentially have to move as a result of the proposed project.
  - ERM responded by noting that current estimations suggest that 35 households may need to be moved, but noted that these were early projections which would need to be ground truthed.
- The Executive Mayor also enquired about how much land the directly affected communities own.
  - Both ERM and Kangra Coal noted that this had not been ascertained as of yet.
- In response to a question, Lisa van Dongen confirmed that all comments received from the municipality would be forwarded to the decision making authorities at National and Provincial government levels so that they were considered during the decision making.

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**KEY OUTCOMES OF THE MEETING****ACTION OR  
OBSERVATIONS**

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***A1.15 RESPONSES TO PRESENTATION ON PROPOSED  
PUBLIC PARTICIPATION PROCESS (PPP);***

ERM requested input into the proposed PPP and further asked the municipality to advise on which stakeholders should be targeted for inclusion into the PPP. The following responses were made:

- It was agreed that the stakeholder groups identified by ERM and the means of communication are relevant for this project.
- It was identified that the directly affected Ward in this process is Ward 2. However the Councillor from Ward 2, Councillor Nkosi, was not present. It was agreed that Councillor Thwala (Ward 1) will liaise with Councillor Nkosi about the meeting and the project. Furthermore, several other councillors live in Driefontein and surrounds and it was recommended that they therefore should be included (including the councillor for Wards 1 and 18). It was further suggested that ERM should work with the councillor to identify the directly and indirectly affected stakeholders as well as other possible interested stakeholders.  
  
Action: There remains a need to engage the appropriate Ward Councillors, especially Councillor for Ward 2 who was not in attendance.
- Inkosi Mthethwa (Madabukela Traditional Council) emphasised the importance of involving the right people and communities in the PPP. It was noted that it is important to clearly communicate and engage with local communities. Inkosi Mthethwa suggested that this was best achieved through engaging with the correct Traditional Authority. He noted that they would otherwise get left behind in such processes.  
  
\*Note: concerns around gate keeping from the Traditional Authority (intimation that there might be contest of Traditional leadership)
- The three languages identified (Zulu, English and Afrikaans) were identified as being the appropriate languages for the targeted stakeholders.
- With regards to the establishment of a stakeholder database, it was agreed that this would need to occur through an information gathering process.  
  
Action: Receive their IDP database
- In response to a question about appropriate publications, it was identified that the Mkhondo News was an appropriate channel. A contact person for Mkhondo News was provided.  
  
Action: Investigate whether there are land claims in the area and,

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KEY OUTCOMES OF THE MEETING	ACTION OR OBSERVATIONS
<ul style="list-style-type: none"><li>Venues to display the materials were endorsed. It was suggested that Piet Retief should be the main town to display materials. Key locations were identified as the post office, library and municipal offices. It was further suggested that notices could be made available in Driefontein and around the neighbouring farms.</li><li>It was noted that, if there were land claims, these people should be included in the process.</li><li>It was noted that, if considered necessary, the Mkhondo Municipality would be willing to attend a meeting held in conjunction with Dr Pixley Kalsaka Seme Municipality as the project will span across both municipalities.</li></ul>	if so, involve these stakeholders in our process.

**A1.16**

***A1.17 IDENTIFICATION OF CONTACT PERSON FOR ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT (ESIA) APPLICATION;***

It was agreed that the official contact person for the Mkhondo Municipality should be Mr Phasha – Local Economic Development Manager.

In terms of future correspondence with the municipality, it was requested that all correspondence be sent to the Executive Mayor and the Municipal Manager for them to distribute internally as appropriate.

***A1.18 CLOSING COMMENTS;***

The municipality noted that they had a good relationship and were hoping that this would continue. They thanked Kangra Coal and ERM for coming to involve them early in the process. They expressed their confidence that this process would be undertaken in an appropriate manner going forward.

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<b>Subject/Ref</b>	Notes of Meeting with CL Greyling
<b>Venue</b>	Wakkerstroom
<b>Date of Meeting</b>	22 July 2011
<b>Present</b>	Jimmy Mnisi, Lisa van Dongen, Nomsa Fulbrook-Bhembe, CL Greyling
<b>Distribution</b>	Internal ERM Team; Hatch; Kangra Coal
<b>Date</b>	16 August 2011

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## KEY OUTCOMES OF THE MEETING

## ACTION OR OBSERVATIONS

### *A1.19 BACKGROUND:*

CL Greyling is the uncle of CJF Greyling. CL Greyling was identified as the key landowner on the neighbouring land on Roodeport, Blinkwater, Naauwhoek and Kikvorschfontein.

Lisa van Dongen introduced the proposed Project and provided an explanation on ERM and the public participation process.

### *A1.20 COMMENTS AND INPUTS:*

Following an introduction from Lisa, CL Greyling viewed the map and indicated the properties he farms on.

During the meeting CL Greyling did not voice any concerns; however, it was noted that he was fully aware of Environmental Impact Assessment (EIA) processes and the potential (negative) impacts of mining projects.

**Subject/Ref** Minutes of meeting with Kanluka Community

**Venue** Central Meeting Venue on Kanluka Community Land

**Date of Meeting** 22 July 2011

**Present** Nomsa Fulbrook-Bhembe, Jimmy Mnisi, Lisa van Dongen, Members of Kanluka community (see below)

**Distribution** Internal ERM Team; Hatch; Kangra Coal

**Date** 11 August 2011

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Name & Surname	Organisation/Position
Richard Hlatsbuayo	Representative of Kanluka community
Themba Maisela	Representative of Kanluka community
Jabulani Nhleko	Representative of Kanluka community
Sphiwe Senyivango	Representative of Kanluka community
Solomon Dhlolongolo	Representative of Kanluka community
Nomsa Fulbrook-Bhembe	Consultant ERM
Jimmy Mnisi	Facilitator Di-Idea
Lisa van Dongen	Consultant ERM

## KEY OUTCOMES OF THE MEETING

## ACTION OR OBSERVATIONS

### *A1.21 BACKGROUND:*

The Kanluka Community have been identified as one of the communities that own land, and who will be affected by the proposed Project. The Kanluka community form the Kransbank Communal Property Association who has owned land since 2002. The land was acquired through a land claim.

The area of land owned by the Kransbank Communal Property Association was identified as approximately 1,499ha with 54 households. It was estimated that each house accommodates on average 10 to 15 people.

### *A1.22 COMMENTS AND INPUTS:*

The representatives present at the meeting stated that Kangra Coal has already started prospecting and has spoken to members of the Kransbank CPA.

Observation: this may cause fragmentation between communities.

The representatives at the meeting raised the concern that the underground mine will cause cracks in their aboveground structures (houses etc).

Action: some sort of confirmation will need to be ascertained from the technical team in this respect, as there are several parties that have voiced this concern.

They also voiced their concern over the benefits that they will derive from the mine. They voiced the concern that less infrastructure on their property would decrease the flow of benefits to their community.

The representatives noted the existence of the Kransbank Trust/Heritage Site but noted that there has not been a lot of involvement from authorities. However the government did fence the area off.

Action: further research to be conducted.

### *A1.23 PROCESS CONSIDERATIONS:*

The fact that Kangra Coal has already had prior engagement with the Kanluka Community may establish an expectation of ERM coming into the arena. There is therefore a need to engage with all communities appropriately.



## Record of Second Meeting

Jimmy Mnisi attended a second meeting on 29 July. The purpose of the meeting was to drop-off materials with Mr Nhleko that will be distributed to the wider community.

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KEY OUTCOMES OF THE MEETING	ACTION OR OBSERVATIONS
Jimmy Mnsis met with Jabulani Nhleko of Kanluka Community near his house.	
The meeting consisted of dropping off the material and an explanation about the content of the materials.	
Mr Nhleko agreed to distribute to the community. However it was noted by Jimmy that there is no way to ascertain that the materials have reached the community at large.	Action: follow up on distribution of material is required
It was suggested by Jimmy (to ERM) that a day of follow up or going door-door is needed for the directly affected communities.	

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<i>Subject/Ref</i>	Minutes of meeting with Thuthukani
<i>Venue</i>	Mr Linda's homestead
<i>Date of Meeting</i>	22 July 2011
<i>Present</i>	Nomsa Fulbrook-Bhembe, Jimmy Mnisi, Lisa van Dongen, Mr Linda, Mr Sibiya
<i>Distribution</i>	Internal ERM Team; Hatch; Kangra Coal
<i>Date</i>	16 August 2011

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KEY OUTCOMES OF THE MEETING	ACTION OR OBSERVATIONS
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*A1.24 BACKGROUND:*

The Thuthukani Community was identified as owning land that will be directly affected by the proposed Project. The current representative of the Thuthukani Community is Mr Linda.

The land belonging to the Thuthukani community has been identified as Twyfelhoek 379.

*A1.25 RESULTS OF THE MEETING:*

The meeting served as an introductory visit. Following introductions it was suggested that a second visit should be organised whereby Jimmy would attend a meeting with the relevant community members.

It was agreed that Jimmy would return to conduct a formal and thorough introduction to ERM, the Public Participation Process and the Project.

*RECORD OF JIMMY MNISI'S MEETING – 28 JULY 2011*

*Record of Second Meeting*

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<b>KEY OUTCOMES OF THE MEETING</b>	<b>ACTION OR OBSERVATIONS</b>
Jimmy Mnisi met with Mr Linda of Thuthukani Community near his house.	
The meeting consisted of dropping off the material with Mr Linda and providing an explanation about the content of the materials.	
Places to distribute the materials were discussed. In addition it was indicated that Mr Linda would distribute the materials to his community.	Action: follow up to establish the materials were distributed

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*Subject/Ref* Minutes of meeting with Dr Yende of Yende  
community

*Venue* Dr Yende's homestead

*Date of Meeting* 22 July 2011

*Present* Nomsa Fulbrook-Bhembe, Jimmy Mnisi, Lisa van  
Dongen, Dr Yende

*Distribution* Internal ERM team; Hatch; Kangra Coal

*Date* 16 August 2011

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## KEY OUTCOMES OF THE MEETING

## ACTION OR OBSERVATIONS

### *A1.26 BACKGROUND:*

The Yende Community was identified as owning land that will be directly affected by the proposed Project. Dr Yende spoke on behalf of the Yende Community; however, it was noted that there was uncertainty over the new election of a Chairperson of the community. Dr Yende was identified as the Chairperson of the Donkerhoek Development Committee.

Action: more information required on the Yende Community

The land belonging to the Yende Community has been identified as Twyfelhoek. In addition Dr Yende identified parts of Donkerhoek that also belong to the Yende Community.

### *A1.27 COMMENTS AND INPUTS:*

Dr Yende identified that there are other communities in addition to the directly affected communities that should be addressed in the Public Participation Process (PPP). The communities live on the following four farm properties: Prospect 1, Prospect 2, Witbank and Jagdrift. These are neighbouring properties to the north of the Project area. Chairpersons of the Communal Property Associations (from the four farm properties) plus the three affected farm properties form the Donkerhoek Development Committee.

Action: it was agreed that materials will be distributed to the CPA representing the seven communities.

Dr Yende requested full inclusion of all of the aforementioned communities in the PPP. He also requested that if any negotiations occur with Kangra Coal that these communities should be included.

Dr Yende noted that Kangra Coal had already engaged with the Kanluka community (who neighbour on the Yende community), and this had caused some friction between the communities.

Dr Yende also requested that the long term benefits of such a project should be identified. He emphasised that the project needs to be sustainable, and needs to consider long term impacts on the unborn generation.

Dr Yende identified the Rural Development Office as a good place for a public meeting (near Driefontein); however, transportation would need to be arranged.

Action: transportation arrangements to be made by ERM for the public meeting.

*A1.28 PROCESS CONSIDERATIONS:*

It has been noted that there may be existing friction between the directly affected communities as a result of Kangra Coal's previous engagement. This history will go to inform the ongoing PPP. Therefore careful consideration must be taken when engaging with the communities.

*RECORD OF JIMMY MNISI'S MEETING – 28 JULY 2011*

Jimmy Mnisi attended a second trip to the area and met with Dr Yende (at his house) on 28 July. The outcomes of this meeting are documented below.

*Record of Second Meeting*

<b>KEY OUTCOMES OF THE MEETING</b>	<b>ACTION OR OBSERVATIONS</b>
<p>It was established that Dr Yende has introduced ERM and our process to the Donkerhoek Development Committee.</p> <p>It was confirmed that Donkerhoek Development Committee structure comprises of Chairpersons of the neighbouring CPAs (farm properties). The contact details of the individual Chairpersons were received from Dr Yende.</p>	
<p>Jimmy provided the materials to Dr Yende to distribute to the Chairpersons of the CPAs. It was established that a follow up call must be made to ascertain that they have received the materials.</p>	<p>Action: follow up call to the individual Chairpersons of the Donkerhoek Development Committee.</p>
<p>Dr Yende offered to erect posters at the shop near Twyfelhoek Primary School and on the sign post on the main road.</p>	<p>Action: Dr Yende will supply proof of site notice erection to Jimmy Mnisi.</p>
<p>It was noted by Dr Yende that he may not stay the Chairperson of the Yende Community. He stated that the election of the Yende Community Chairperson has been chaotic. Dr Yende will let us know as soon as a new Chairperson has been elected.</p>	





Subject/Ref            Notes of Meeting with Chief Moloi

Venue                    Driefontein

Date of Meeting        29 July 2011

Present	Jimmy Mnisi, Chief Moloi, Peter Moloi, Mr Matona, Tau (Di-Idea Communications)
Distribution	Internal ERM Team; Hatch; Kangra Coal
Date	16 August 2011

**KEY OUTCOMES OF THE MEETING**

**ACTION OR  
OBSERVATIONS**

*A1.29 BACKGROUND:*

Chief Moloi has been identified as the Tribal Authority in the area of Dr Pixley Kalsaka Seme Local Municipality.

This meeting originally served as an introductory visit; however, Chief Moloi had not been briefed on ERM's meeting with the municipality. Thus a brief presentation was given by Jimmy outlining ERM, their process and the proposed project.

*A1.30 COMMENTS AND INPUTS:*

Chief Moloi requested for meeting or for a discussion with Kangra Coal regarding royalties paid to him and the community. He has requested that ERM pass on the message and is requesting for a private meeting with Kangra Coal.

Chief Moloi would like assurance that the mine operation will not be releasing emissions into the surrounding air. He indicated specifically the release of harmful fumes as well as odours that may emanate from proposed project activities.

Chief Moloi noted that he would like meaningful jobs to be created for the community as a result of this proposed Project.

Chief Moloi requested that the materials are translated in to Sesotho for the future. He suggested that this would a better means of communicating with his community.

Action: ERM will pass Chief Moloi's request for a private meeting on to Kangra Coal

Action: the comment was noted however it was explained that the selection of languages to be used was based on the approval received from both municipalities and all those in attendance at the meetings.

Chief Moloi mentioned the existence of another Tribal Authority in the area. The Chief's surname was indicated to be Tshabalala. Chief Moloi did not have the contact details for Chief Tshabalala and was not keen to give more information.

Action: Follow up on contacting Chief Tshabalala, and establish contact details.

*A1.31 PROCESS CONSIDERATIONS:*

Due to the issues raised over the relevant languages to be used in the PPP materials this may need to be discussed as part of our PPP going forward.

Action: consider languages to be included in the next round of engagement or if there is motivation to reconsider the use of languages.

During the meetings with both Local Municipalities it was agreed on the use of isiZulu however Chief Moloi's preferred the use of isiZulu.

Chief Moloi's potential reluctance to provide details on the other Traditional Authority in the area may point to the fact that there maybe rivalry/political agendas between both Authorities in the area.

Action: confirm the presence of the traditional authority.

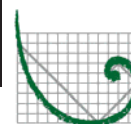
Consider the way in which both traditional authorities will be engaged during the PPP.

**Environmental  
Resources  
Management**

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<i>Subject/Ref</i>	Introduction of Kangra Coal Kusipongo Resource Expansion Project to the Department of Water Affairs
<i>Venue</i>	ERM Offices, Johannesburg
<i>Date of Meeting</i>	25 October 2011
<i>Present</i>	Please see attached attendance register
<i>Distribution</i>	All in attendance; Internal Hatch team; Internal ERM team
<i>Date</i>	3 November 2011

*Postal Address:*  
Postnet Suite 624  
Private Bag X29  
Gallo Manor, 2052  
Johannesburg  
South Africa



**ERM**

This minute serves as the record of the meeting between Hatch, HydroScience, Environmental Resources Management and the Department of Water Affairs (DWA) on 25 October 2011. The objective of the meeting was to introduce the Project to the DWA. In addition the meeting served to discuss the key sensitivities of the Project and the scheduling going forward.

*Registered Company address:*  
Environmental Resources  
Management  
Southern Africa (Pty) Ltd  
Building 32, 1st Floor,  
The Woodlands Office Park,  
Woodlands Drive  
Woodmead, 2148

*Company registration number*  
2003/001404/07

*Directors*  
Jeremy Soboil (Managing)  
Dylan Campbell  
Grant Bassingthwaighte  
John Alexander (UK)  
John Simonson (UK)

*Offices worldwide*

A member of the  
Environmental Resources  
Management Group

<p><b>Welcoming to the Meeting</b></p> <ul style="list-style-type: none"> <li>ERM welcomed all attendees to the meeting</li> <li>HydroScience gave an introduction of all attendees</li> </ul>	
<p><b>Objective of the meeting as presented by HydroScience</b></p> <ul style="list-style-type: none"> <li>Objectives of the meeting were identified (please refer to presentation attached as Annex B)</li> <li>HydroScience identified that they will be submitting the Integrated Water and Waste Management Plan (IWWMP) to support the Integrated Water Use License Application (WULA) during the latter part of next year.</li> </ul>	<p><b>ACTION</b></p>
<p><b>Locality of the Project Area</b></p> <ul style="list-style-type: none"> <li>HydroScience presented the locality of the Project including maps illustrating the Projects proximity to Ermelo, Piet Retief and Driefontein</li> <li>The Study Area was identified including the current location of the Main Mine Adit, and Adits B &amp; D</li> </ul>	
<p><b>Project Overview</b></p> <ul style="list-style-type: none"> <li>The existing mine, proposed expansion and all associated infrastructure were identified</li> <li>It was confirmed that there will be no electricity distribution lines running from Adit A to Adits B &amp; D</li> <li>The layout of the Main Mine Adit and associated infrastructure was discussed</li> <li>The Kransbank Site was also identified and described to the DWA</li> <li>The conveyor belt was identified as one of the new infrastructure items for the Project. The distance of the proposed conveyor belt was noted as being 7.3km in length</li> <li>The depth to be mined was queried by the DWA, in addition to the thickness of each of the seams, and the overburden depth</li> <li>When discussing the Project overview it was established that there are currently no plans for the underground storage of groundwater seeping into the underground workings. The DWA suggested that provision for a underground storage dam should be included in the Water Use License Application</li> </ul> <p><i>Please note it has now been confirmed that there will be a series of dams constructed underground as part of the Project</i></p>	<ul style="list-style-type: none"> <li>Confirm distance of conveyor belt to wetlands and crossings over</li> <li>This information will be made available in the draft Scoping Report (DSR)</li> <li>Include underground storage facility</li> </ul>
<p><b>NWA Section 21 Water Uses</b></p> <ul style="list-style-type: none"> <li>The potential uses of water for the Project were outlined. The relevant sub-sections under Section 21 of the NWA were also identified</li> <li>It was confirmed that a borehole (located just north east of the site) would be used as a potable water source. Water used in operations will be sourced from stormwater, groundwater seeping into the mine workings, and sewage. It was established that dirty stormwater will be cleaned and processed on site</li> <li>The location of the sewage sludge drying beds, emergency overflow evaporation pond, and waste rock dump were identified as areas of concern by the DWA (discussed further under wetland section)</li> <li>DWA noted that all infrastructure within 500 m of a wetland should be included in the Water Use Licence Application</li> </ul>	
<p><b>Water Environment</b></p> <ul style="list-style-type: none"> <li>The water resources in the area were identified during the presentation. These include water management areas, quaternary catchments, and surface water resources (please refer to presentation attached as Annex B)</li> <li>Surface water (particularly wetland at Adit A, rivers etc), and groundwater features in the area were identified as being in pristine condition. Water resources were identified at Adit B and D, thus it was agreed that the total Adit area of 500m<sup>2</sup> was necessary to allow for the ventilation shafts to be suitably positioned away from the wetlands</li> </ul>	<ul style="list-style-type: none"> <li>This information</li> </ul>

<ul style="list-style-type: none"> <li>• The DWA queried the type of aquifers that are present in the study area. This is important for identifying the connectivity between shallow and deep aquifers in the area, and their influence on the wetland</li> <li>• The type of aquifers present will also inform which aquifers feed the wetlands, and therefore the depth of mining that should be conducted</li> <li>• The DWA recommended that groundwater monitoring systems are put in place for the boreholes taking into account both shallow and deep aquifers. Surface and shallow groundwater should be monitored monthly, and deep groundwater quarterly</li> <li>• The DWA requested that stormwater management on the Main Mine Adit be addressed. Particularly due to the proximity of the adit to the Hlelo River and its tributary the Ohlelo River</li> <li>• The EIA must not only look at the potential impacts on the immediate wetlands, rather potential impacts to the entire reserve and catchment need to be assessed</li> <li>• It was discussed that the Geelhoutboom Dam and Heyshope Dam may fall under the jurisdiction of the DWA. The EIA will also need to assess the impacts that the proposed Project may have on these two significant water resources.</li> <li>• The EIA will need to also assess the impacts that the proposed Project will have on springs in the area. Affected springs will need to be included in the Water Use Licence Application.</li> <li>• WULAs require a reserve determination to be completed by DWA before the licence can be issued. For this project a reserve would have to be done for the Ohlelo River and the affected wetlands.</li> <li>• It is possible for the Project to undertake a reserve determination but this has to be confirmed in writing by Ms. Barbara Weston and has to be done by specialists recognised by DWA.</li> <li>• The DWA requested that a decant and geochemical model must also be submitted. Acid base accounting and leachate results must be included.</li> <li>• It was established that water quality targets for the area indicate a TDS of 80mg/l. Thus it was questioned whether this could be honoured by the Project.</li> <li>• The DWA also indicated that the water quality of the old mine must be compared with the intended new activity taking into account current compliance at the existing mine.</li> </ul>	<p>will be made available in the draft Scoping Report (DSR)</p> <ul style="list-style-type: none"> <li>• Confirmation required under which jurisdiction the Geelhoutboom and Heyshope Dam fall under</li> </ul>
<p><b>Wetland – Adit A</b></p>	
<ul style="list-style-type: none"> <li>• The DWA identified that the conveyor belt crossings over the wetland are a concern. However the DWA voiced greater concern over the permanent infrastructure at Adit A, particularly because the majority of the Adit is located within a wetland.</li> <li>• At least a third of Adit A is located on wetlands – the DWA requested for the current ecological status of the wetlands to be included in ERM’s assessment.</li> <li>• The sewage sludge drying beds and emergency evaporation pond are key red flags as they are too close to the Hlelo River.</li> <li>• The lining of the pollution control dams will be confirmed in the Scoping Report but it was believed that they would be lined with HDPE lining.</li> <li>• The Project needs to assess the impacts on deep and shallow aquifers in the area.</li> <li>• The DWA strongly recommended reviewing the position of Adit A. The DWA stressed the technical and financial implications of the current siting. If the groundwater level in the Main Mine Adit area is shallow this will result in large volumes of water in the workings area. Water from the wetland will also be dewatered as the water will be drawn to the underground workings. Dewatering the wetland would also require a Section 21(a) WUL.</li> <li>• The waste rock dump was also identified as a red flag by the DWA. Reason being that the soils on which the dump will be located are unstable, which may result in the rock dump cascading into the Ohlelo River.</li> <li>• Given the reasons above, it was identified that a wetland study must be conducted to understand whether the wetlands are fed by groundwater aquifers (shallow or deep) or surface water.</li> <li>• The wetland assessment must include an assessment of the area within 500 m of the wetland.</li> <li>• An estimate of the probability that the WULA would be approved given the location of Adit A and the project intention to investigate a suitable biodiversity offset was requested from the DWA.</li> <li>• In response to the above Dr Meulenbeld responded that with the current positioning of Adit A, there was a 20% probability that the WULA would be approved by the DWA.</li> <li>• In addition Dr Meulenbeld raised the concern of water infiltration into the Adit A area.</li> </ul>	<ul style="list-style-type: none"> <li>• This information will be made available in the draft Scoping Report (DSR)</li> </ul>

<p>Consequently there will be water management and treatment costs which maybe financially viable during the life of the mine. However once the mine closes this will become a government problem, and it is therefore perceived to be a significant liability.</p> <ul style="list-style-type: none"> <li>• It was stressed that the rehabilitation funds available from Financial Provision set aside for mine closure would be insufficient to cover the costs of water management and treatment.</li> <li>• The DWA strongly recommended shifting Adit A out of the wetland. This would result in a decreased risk of impacting on receiving water resources. This would also increase the chance of the WULA being approved to over a 60% probability.</li> </ul>	<ul style="list-style-type: none"> <li>• Assessment of the current location of Adit A to be conducted</li> </ul>
<p><b>Wetland – Adit B</b></p>	
<ul style="list-style-type: none"> <li>• Wetland areas at Adit B were discussed.</li> <li>• . The ventilation shaft must be sited outside of the wetlands. If any groundwater decanting is required then a license must be applied for.</li> </ul>	
<p><b>Wetland – Adit D</b></p>	
<ul style="list-style-type: none"> <li>• Again the area for the ventilation shaft should be sited away from the wetland. Consideration must be given to ensure that the access road does not encroach on the wetland.</li> </ul>	
<p><b>Wetlands and Mining</b></p>	
<ul style="list-style-type: none"> <li>• The ecological and social ranking (functionality) of the wetland is also a key factor in the assessment for a WULA.</li> <li>• The DWA identified that the mining plan must overlay all watercourses on a master plan.</li> <li>• The DWA also identified that a soil map of the area is required. The map must cover all mining and wetland areas.</li> <li>• From the sensitivity studies conducted by ERM thus far the wetland has been ranked between 4.0 and 5.0, as such these wetlands are in a near pristine condition.</li> <li>• The DWA stated that wetlands with such a rating are almost a no-go. If the ranking of a wetland of such pristine condition is lowered as a result of the Project, it will be very difficult to implement ecological offsets (refer to comments on offsetting below).</li> <li>• It was established by the DWA that for this Project they are not in favour of the offsetting option. The wetland that is to be disturbed/lost is in pristine condition. It is impossible to restore wetland offset areas to a functionality ranking like that of the wetland proposed to be disturbed at Adit A.</li> <li>• On the topic of offsetting the DWA stated that to effectively offset the impacts the Project would need to have an overall positive balance. This would effectively mean upgrading another wetland to pristine condition (and to the same ecological functionality) which is almost impossible and economically unviable. Furthermore the wetlands functionality on water quality is difficult to achieve through offsetting.</li> <li>• The DWA requested for the impact of establishing infrastructure near wetlands to be reassessed, as this Project (as it stands) has a high probability of impacting on the greater catchment.</li> <li>• DWA noted that adit locations in wetlands were common in water use licence applications because this often happened to be the easiest route for accessing the resource. If all the water management and treatment costs over the life of the mine (including the technical design aspects for the water) due to placement of the adit in the wetland were considered, the Adit A location may not prove to be the best location.</li> <li>• The upcoming COP17 in Durban will look towards identifying areas of high conservation status in South Africa. This will put pressure on the DWA to conserve areas such as where the Project is located.</li> <li>• The key point stressed by the DWA was the impact of dewatering on the wetland.</li> <li>• The geology of the area will also influence the impacts. The DWA stressed the importance of including information on soils in the EIA report.</li> <li>• Hatch questioned that if all the possible Project alternatives had been assessed and this positioning was deemed the most reasonable and feasible option, what would the DWA’s requirements be if the Project was approved? The DWA responded that if the application was not denied, there will be certain restrictions to the Project. . Such restrictions / conditions of</li> </ul>	

<p>the WUL may also render the project economically unviable or not feasible. The Client must carefully assess the risks of the positioning of Adit A, and the financial costs associated with this.</p> <ul style="list-style-type: none"> <li>• The DWA asked whether ERM will be taking into account the impacts that are associated with current Kangra Coal mining operations in the area. ERM/Hatch responded that the cumulative impacts will be assessed in the EIA report.</li> <li>• Stormwater outlets for clean stormwater runoff into the receiving river courses must not be erosive. As such, energy dissipaters need to be included in Project design and stormwater inflow and outflow rates (m<sup>3</sup>/s) need to be calculated.</li> <li>• If the DWA had to grant a WUL for a Project such as this, it would set a negative precedence for other mining Projects in the area, and will place the DWA in a difficult position.</li> </ul>	
<p><b>Public Participation Process</b></p>	
<ul style="list-style-type: none"> <li>• Eskom was identified as a potential stakeholder given their interest in the surrounding dams.</li> <li>• In addition the importance of trans-boundary impacts was discussed. This included international agreements with countries such as Swaziland. The importance of this being that Swaziland is fed by water from this area.</li> <li>• The local community needs to be included in discussions on the use of water resources in the Project area, particularly the use of the springs.</li> <li>• The DWA confirmed that it is best practice to extend the 60 day comment period to all stakeholders in the process.</li> <li>• Mr Pieter Viljoen and Mr Kelvin Legge from the National DWA need to be included on the stakeholder database, on dam infrastructure, water quality and international obligations.</li> </ul>	
<p><b>Schedule</b></p>	
<ul style="list-style-type: none"> <li>• The schedule for the EIA process and all associated license applications was outlined by ERM.</li> <li>• With regards to the WULA, Hatch queried whether geological exploratory drilling could go ahead on and around the wetland before the WULA for the greater Project is concluded.</li> <li>• In response to the above, the DWA stated that a separate application must be lodged for any geological exploratory drilling on the wetland (and within the 500 m radius of the wetland). However given the DWA's knowledge of the application's association with the proposed Project the DWA raised concerns over authorisation. Dr Meulenbeld stated that authorisation for geological exploratory drilling (and any damages to wetlands) is dependent on the view of the greater application.</li> <li>• The DWA estimated that the licensing period for exploratory drilling will be approximately one week for the National DWA to review and issue authorisation, if all supporting documentation is sufficient and appropriate.</li> <li>• The DWA estimated that the processing and potential approval of the WULA for the greater Project will take approximately six months. These timeframes however assume that all the necessary supporting information accompanies the application.</li> </ul>	
<p><b>Additional</b></p>	
<ul style="list-style-type: none"> <li>• The DWA requested for the colour scheme on the site layout maps to be changed. They requested for clearer delineation on the map between the clean and dirty water systems.</li> <li>• In the EIA report the Main Mine Adit (Adit A) layout needs to be overlaid on the wetland delineation map for the area.</li> <li>• No regional water quality guidelines are available. The baseline water quality for the area was therefore important information for the department consideration of the WULA.</li> </ul>	



Annex F

## Comments and Response Report

Stakeholder	Stakeholder Category	Stakeholder Sub-Category	Comment	Date	Source	Response
<b>Questions of Clarity around the Proposals</b>						
ZH Luhlanga	Government stakeholders	Dr Pixley Kalsaka Seme Local Municipality – Speaker of the House	Question on the distance from the existing mine to the proposed mine. In addition whether mining activities would continue at the existing mine	2011/07/20	Meeting with municipality	The proposed facility is approximately 10 km west from the existing facility. It should be noted that mining activities at the existing mine stop once the mineral resource in that area had been depleted (between 3 – 5 years). Processing activities would continue to take place at the existing facility for a period of 10 to 20 years.
CJF Greyling	Private Landowner	Private Landowner	Query as to why the shaft and surface infrastructure located at Adit A is not located on the Kransbank farm (a more direct routing from the existing facility)	2011/07/21	Meeting with CJF Greyling	Various factors informed the identification of potential coal access locations. Please refer to Chapter 7 of the Draft Scoping Report.
CJF Greyling	Private Landowner	Private Landowner	Would like confirmation on the exact location and extent of the mining at Adit A.	2011/07/21	Meeting with CJF Greyling	Please refer to Sections 2.2 and 2.3 in Chapter 2 of the Draft Scoping Report.
CJF Greyling	Private Landowner	Private Landowner	Request for more information on mining aspects including the type of coal to be mined, depth and thickness of layers to be mined.	2011/07/21	Meeting with CJF Greyling	Coal to be mined is bituminous, depth 30-300 meters and thickness 1.5-4 meters. Please refer to Section 2.2 in Chapter 2 of the Draft Scoping Report.
CJF Greyling	Private Landowner	Private Landowner	Request for confirmation that the underground mine (aside from those areas that have been identified as having new infrastructure) will not affect any surface infrastructure or people living on top of the land.	2011/07/21	Meeting with CJF Greyling	Mining design criteria have been established to eliminate the possibility of surface subsidence.

CJF Greyling	Private Landowner	Private Landowner	Mr CJF Greyling raised the concern that exploration holes are too close to his house and next to his gate / fences and that he does not want them so close, 200m to 300m would not make that much difference but means a lot if it is not at his gate. He requested them not closer than 300m from his farm yard.	2011/07/28	Meeting with CJF Greyling	Noted. This request was communicated to Kangra Coal. Kangra Coal has taken the 300 meter request into account and in future will adhere to the required distance.
G Loubser	Environmental Organisation	MEPA (Mkhondo Environmental Protection Association)	Mrs Loubser believed that all applications to new prospecting and mining activities (licenses / rights / expansions) have been placed under moratorium in Mpumalanga to at least September 2011. Why would Kangra not be subjected to this moratorium?	2011/08/16	Written comment	This moratorium applies strictly to new prospecting rights in Mpumalanga Province. Kangra Coal had established prospecting rights prior to the moratorium and is seeking mining rights (to which the moratorium does not apply).
A Burns	Environmental Organisations	WWF-SA - Coordinator Enkangala Grassland Project	The properties fall within a proposed section 49 exclusion zone submitted by Mpumalanga Tourism and Parks Agency (MTPA) to the DMR last year. The reason for this proposed exclusion zone is to prevent further incompatible and hydrologically destructive activities from taking place in catchments considered to be of high value from a water production perspective.	2011/08/16	Written comment	Noted. This will need to be dealt with through the EIA process. The MTPA has been identified as a key commenting authority in the process and this issue will be discussed with them.
<b>EIA Process</b>						
General suggestion	Government stakeholders	Dr Pixley Kalsaka Seme Local Municipality	ERM was recommended to make direct contact with farm owners, rather than just rely on the PPP. Similarly, for affected communities, he noted that distribution of flyers is not sufficient and that these would need to be augmented with face-to-face engagement to ensure full understanding.	2011/07/20	Meeting with municipality	Noted. The PPP has been expanded to allow for more direct contact with these directly affected communities. Please refer to Chapter 5 of the Draft Scoping Report.
O Mavuso	Government stakeholders	Dr Pixley Kalsaka Seme Local Municipality - Director of Urban & Economic Development	Draft Scoping Report should be sent to the Director of Planning and Economic Development. He will champion this internally, summarising key aspects of the project for Council.	2011/07/20	Meeting with municipality	ERM agreed to provide the Draft Scoping Report to Mr. Mavuso.

General suggestion	Government stakeholders	Mkhondo Local Municipality	It was suggested that ERM should work with councillors (Ward 2) to identify the directly and indirectly affected stakeholders as well as other possible interested stakeholders.	2011/07/21	Meeting with municipality	Noted. ERM will make contact with this councillor to discuss further.
General suggestion	Government stakeholders	Mkhondo Local Municipality	Suggestion that the establishment of a stakeholder database would need to occur through an information gathering process.	2011/07/21	Meeting with municipality	Noted. This information gathering is underway and will continue throughout the EIA process. A significant database has already been constructed. See Chapter 5 of the Draft Scoping Report as well as Annex B.
General suggestion	Government stakeholders	Mkhondo Municipality	The Mkhondo Municipality proposed a combined meeting with the Dr Pixley Kalsaka Seme Municipality (if necessary) as the project spans across both municipalities.	2011/07/21	Meeting with municipality	Noted. Efforts will be made to convene such a meeting.
Chief Mthethwa	Government stakeholders	Traditional Authority	Chief Mthethwa noted the importance of engaging with the relevant communities and indicated this could be achieved through engaging with the correct Traditional Authority.	2011/07/21	Meeting with municipality	Noted. ERM will continue to engage with both the Traditional Authorities and directly through other community structures.
Chief Moloji	Traditional Authorities	Traditional Authority	Request for materials to be translated into Sesotho in the future. Disagreement on the use of isiZulu as a means of communication for the PPP.	2011/07/29	Meeting with Chief Moloji	Noted. Materials from the Scoping Phase will be translated into Sesotho as well as isiZulu, Afrikaans and English.
D Yende	Community stakeholders	Yende community – Chairperson of the CPA	Raised concerns about the existing relationship between Kanluka and Kangra Coal where engagement has not been extended to other communities. Noted potential to cause fragmentation between communities.	2011/07/22	Meeting with D Yende	Noted. ERM has communicated this to Kangra Coal. The PPP is aimed at engaging with all Interested and Affected parties.
D Yende	Community stakeholders	Yende community – Chairperson of the CPA	Request for full inclusion of all 7 of the CPAs in the area, including the 3 directly affected landowner-CPAs and the 4 neighbouring landowner-CPAs in the PPP and in any negotiations with Kangra Coal.	2011/07/22	Meeting with D Yende	Noted. All of these communities will be included in the PPP. It should, however, be noted that directly affected communities will be engaged with differently from neighbouring communities because of the difference in the way in which the project will impact upon them.

A Steenkamp	Environmental organisations	Birdlife South Africa: Wakkerstroom - Centre Manage	Recommended that there is sufficient interest to run a public meeting in Wakkerstroom.	2011/07/21	Meeting with A Steenkamp	ERM believes that there are advantages of convening an integrated meeting where stakeholders with different interests come together. There will, however, be opportunities to engage through one-on-ones or bilaterals with stakeholders in Wakkerstroom if required/requested.
A Steenkamp	Environmental organisations	Birdlife South Africa: Wakkerstroom - Centre Manage	Recommended proactive and positive engagement with stakeholders, identifying the fact that stakeholders can take an aggressive approach during EIA processes.	2011/07/21	Meeting with A Steenkamp	Agreed. To date, ERM has proactively sought to identify key stakeholders, including stakeholders with an environmental interest. More extensive engagement is also planned with key stakeholder groups.
D Yende	Community stakeholders	Yende community – Chairperson of the CPA	Raised concern about the proposed location of the meeting, and potential need for transportation to be arranged.	2011/07/22	Meeting with D Yende	Noted. Transportation to the meeting will be offered to directly affected communities.
Chief Mthetwa	Government Stakeholder	Traditional Authority	Will you follow the same EIA process as you would for a new mine? Is the fact that the project is called an expansion meaning that it will be ordinarily shorter process and fewer certification and authorisation processes compared to that of setting-up a new mine?	2011/12/20	Meeting with Chief Mthetwa	The word “expansion” is merely used to express that Kangra Coal propose to expand their current mining activities into a new coal resource. ERM is currently carrying out a detailed EIA exercise and is facilitating application/licensing processes that a new mine would also need to carry out. In short, we will be following the same EIA process that a new mine would need to follow.

Peter Moloi (Chief Moloi's spokesperson)	Traditional Authorities	Traditional Authority	The silence on our part about the project was beginning to shutter the hope of job creation by the proposed expansion of the mine. Is there anything that the TA can do to fast track the project?	2011/12/20	Meeting with Peter Moloi	ERM will be carrying out the EIA process in strict compliance with the requirements in the National Environmental Management Amendment Act (Act 62 of 2008), the Mineral and Petroleum Resources Development Act (Act 28 of 2002) and the National Environmental Management Waste Act (Act 59 of 2008). Only once the necessary licenses and authorisations have been obtained can Kangra Coal implement the proposed Project.
<b>Ground Water and Water Quality Issues</b>						
CJF Greyling	Private Landowner	Private Landowner	Concerns were raised over the impact the proposed project would have on water in the area in the long run in particular once coal had been removed.	2011/07/21	Meeting with CJF Greyling	Concerns around both surface- and groundwater will be an important issue that will be investigated through the EIA.
CJF Greyling	Private Landowner	Private Landowner	It was noted that the holes drilled during prospecting by Kangra Coal and their contractors were not filled immediately..	2011/07/21	Meeting with CJF Greyling	Noted. Kangra Coal has taken action to address this concern. Environmental Compliance Reports confirming this have been submitted to the authorities.
CJF Greyling	Private Landowner	Private Landowner	Request to have access to the detailed Hydrology report (where the impact on each spring needs to be assessed). He also requested for the water specialist reports produced by ERM to be provided to him.	2011/07/21	Meeting with CJF Greyling	The raw data for his farms will be made available to him by Kangra Coal. Please refer to Chapter 8 of the Draft Scoping Report for the interpretation of the technical baseline studies. Detailed hydrological impact assessment studies will be undertaken as part of the EIA study.

CJF Greyling	Private Landowner	Private Landowner	Request for a guarantee and plan to be provided by Kangra Coal outlining how potential draining of water from the farm will be addressed. Mr CJF Greyling commented that there are natural fountains all over his large property used as drinking water for his livestock. If these fountains dry out, he will hold the company responsible for the impact this will have to his farming activities.	2011/07/21	Meeting with CJF Greyling	A management plan including mitigation measures will be developed as part of the EIA and the draft will be made available to Registered Interested and Affected Parties (I&APs) for comment during the Impact Assessment Phase. Mr Greyling will be invited to be part of the process of identifying, assessing impacts and developing possible mitigation measures.
O Mavuso	Government stakeholders	Dr Pixley Kalsaka Seme Municipality - Director of Urban & Economic Development	Common concerns that would need to be considered included the impact on water resources.	2011/07/20	Meeting with municipality	Potential water impacts will be identified and assessed through the EIA process.
A Burns	Environmental Organisations	WWF-SA - Coordinator Enkangala Grassland Project	Given the proximity to the Heyshope dam (which is vital for Eskom's energy production in South Africa), we again feel it would be short sighted to allow any further coal mining activities (in the vicinity of the dam) that could potentially impact on the water quality of this strategically important water resource.	2011/08/16	Written comment	The technical design specialists claim that the project has been designed to eliminate impacts to water in the natural environment. This will be tested through the EIA process. A representative from Eskom will be invited to be part of the process.
C Ah Shene Verdoorn	Environmental Organisation	BirdLife South Africa	BirdLife South Africa submitted noted a concern of the impact of coal mining on the water quality of the Assegai Catchment, which will definitely have knock-on effects on Heyshope Dam (27°00'S; 30°46'E), and could have severe negative impacts for avifauna, where Heyshope Dam is an important site for a large number of birds.	22/08/2011	Written comment	The technical design specialists claim that the project has been designed to eliminate impacts to water in the natural environment. This will be tested through the EIA process. A representative from Eskom will be invited to be part of the process.
<b>Air Emissions and Air Quality</b>						



O Mavuso	Government stakeholders	Dr Pixley Kalsaka Seme Municipality - Director of Urban & Economic Development	Common concerns identified that would need to be considered included NO <sub>x</sub> and SO <sub>x</sub> emissions.	2011/07/20	Meeting with municipality	Noted. Potential air quality impacts will be identified and assessed through the EIA process. Results will be included in the Draft Environmental Impact Report (DEIR) and made available to I&APs for comment during the Impact Assessment Phase.
Chief Moloji	Traditional Authorities	Traditional Authority	Raised concern over the release of harmful fumes as well as odours that may emanate from proposed project activities.	2011/07/29	Meeting with Chief Moloji	
CJF Greyling	Private Landowner	Private Landowner	Concern that the dust from the proposed activities at Adit A will directly affect land for grazing. Also noted that the dust will affect properties south of the site due to prevailing winds in the area.	2011/07/21	Meeting with CJF Greyling	
<b>Socio-Economic and Community issues</b>						
ZH Luhlanga	Government stakeholders	Dr Pixley Kalsaka Seme Local Municipality – Speaker of the House	Question as to how this proposed project will benefit their community, not only from an employment perspective but also in terms of sustainable development and investment in the area.	2011/07/20	Meeting with municipality	The Social and Labour Plan (SLP) for this project has been aligned to the LED (Local Economic Development) Plan of the local municipality. This will further be assessed through the EIA process. Results will be included in the DEIR and made available to I&APs for comment during the Impact Assessment Phase.
VD Nkosi	Government stakeholders	Mkhondo Local Municipality - Member of the Mayoral Committee	Question about the potential for job creation and the number of jobs that would be created.	2011/07/21	Meeting with municipality	Kangra Coal responded approximately 750 existing direct and 150 indirect jobs would be saved (by avoiding closing down of the existing operations) through this proposed intervention. An estimated additional 300 jobs could potentially be created as a result of the proposed project.

General concern	Government stakeholders	Mkhondo Local Municipality	The potential negative impacts of the proposed mine (in addition to the impacts of the existing mine) were raised. This was mainly due to increased trucks on the road and the associated increase in fatalities.	2011/07/21	Meeting with municipality	There will be no increase in the number of coal haulage trucks on the road. Coal will be transported from the new facilities to the existing facilities by an extension of the current conveyor system.
Hon BH Mtshali	Government stakeholders	Dr Pixley Kalsaka Seme Local Municipality - Mayor	Question on the number of people that would have to move as a result of the proposed project.	2011/07/21	Meeting with municipality	It was estimated that 35 households may need to be moved, but noted that these were early projections and this is currently being further investigated. The resettlement action planning (including confirmation of who needs to move and how they will be compensated) falls outside of the remit of the EIA.
Chief Moloi	Traditional Authorities	Traditional Authority	Request for meaningful jobs to be created for the community as a result of the proposed project.	2011/07/29	Meeting with Chief Moloi	Kangra Coal responded approximately 750 existing direct and 150 indirect jobs would be saved (by avoiding closing down of the existing operations) through this proposed intervention. An estimated additional 300 jobs could potentially be created as a result of the proposed project.
CJF Greyling	Private Landowner	Private Landowner	Request for a meeting with Kangra Coal to speak about compensation for the use of CJF Greyling's land.	2011/07/21	Meeting with CJF Greyling	This request has been communicated to Kangra Coal.
D Yende	Community stakeholders	Yende community – Chairperson of the CPA	Raised the importance of ensuring sustainable benefits to the community for the long term (including unborn generations).	2011/07/22	Meeting with D. Yende	The benefit will be assessed through the EIA process. The legally required SLP has been developed to address benefits to the community.
D Yende	Community stakeholders	Yende community – – Chairperson of the CPA	Noted potential conflict within the Yende Community particularly with the election of a new Chairperson. It was noted that Mr. D. Yende may not remain the chairperson of the CPA after this election process.	2011/07/22	Meeting with D. Yende	Noted. This will be considered in future engagement in the area.

General concern	Community stakeholders	Kanluka community – members of the CPA	Voiced the concern that just because less surface infrastructure is being proposed on the Kanluka property (compared to other properties), this should not decrease the flow of benefits to the community. Kanluka would like to see benefits from the proposed project.	2011/07/22	Meeting with Kanluka community	Compensation associated with physical or economic resettlement will be determined through a separate process. The benefits of the proposed project will, however, be identified and assessed through the EIA.
CJF Greyling	Private Landowner	Private Landowner	He was also worried that the mine would attract and poach his skilled people to work on the mine. He has 5 good drivers that he cannot afford to lose.	2011/07/21	Meeting with CJF Greyling	Noted. This concern has been communicated to Kangra Coal.
Rooikop Committee	Community stakeholders	Rooikop community – Representatives of the Committee	The Rooikop community submitted a letter, attached at the end of this table. The letter raised concerns about: <ul style="list-style-type: none"> <li>• The ownership of the land on which they live and their relationship with Kangra Coal (the owners) as well as Kangra' tenants (farmers in the area);</li> <li>• The non-delivering on various promises Kangra was said to have made to the Rooikop community (including monthly stipends, employment, services and maintenance of houses, safety practices associated with houses and preventing cracking, support for an orphanage);</li> <li>• Constraints Kangra's Coal's tenants place on their ability to own cattle; and</li> <li>• Input on who they can address their issues and concerns to (e.g., Kangra Coal, the relevant municipal councillor).</li> </ul>	2011/08/05	Written comment	Noted. ERM will organise a meeting with the leadership of this community to discuss relevance of the concerns raised to this process.
<b>Environmental Concerns</b>						
A Steenkamp	Environmental organisations	Birdlife South Africa: Wakkerstroom - Centre Manage	Noted the area is a very sensitive environment with key wetland areas and significant birdlife (also from a national perspective).	2011/07/21	Meeting with A Steenkamp	Noted. Please refer to Chapter 8 for baseline assessments made to this effect. A detailed ecological impact assessment and associated mitigation measures will be provided in the Draft EIR Report.

O Mavuso	Government Stakeholders	Dr Pixley Kalsaka Seme Local Municipality - Director of Urban & Economic Development Public	It was stressed that consideration should already be taken of mine closure and rehabilitation.	2011/07/20	Meeting with municipality	Noted. Kangra Coal is legally obliged to make financial provision for mine closure and establish a mine closure plan in order to acquire their Mining Right (MPRDA). The mine closure plan will be informed by the EIA results.
A Burns	Environmental Organisations	WWF-SA - Coordinator Enkangala Grassland Project	Large portions of the proposed expansion project fall within catchment areas classed as "irreplaceable" and "highly significant" in terms of the MBCP. These catchments form the headwaters of the Usutu river system and the intended operations would impact on the Hlelo and Assagai rivers (both of which are tributaries to the Usutu river). It is also clear that substantial wetlands are located on the properties in question.	2011/08/16	Written comment	The EIA will consider the MBCP and therefore these concerns. Lisa van Dongen emailed all the environmental stakeholders identified to date to recognise the concerns the sector had already raised, in particular the point that several stakeholders raised around perceived red flags with the proposed project. It noted that the technical studies undertaken as part of the scoping work also identified a number of ecological sensitivities that need to be investigated in more depth during the impact assessment phase (See Chapter 10 of the Draft Scoping Report). It also noted that the ERM team was in the process of re-designing the EIA process, and in particular the PPP, so as to ensure that stakeholder issues raised could
G Loubser	Environmental Organisation	MEPA (Mkhondo Environmental Protection Association)	Mrs Gudrun raised the concern that given that the community has already lodged complaints of pollution with Kangra and other relevant parties regarding its current activities, why in your company's opinion would Kangra be authorised to expand without having addressed our current concerns? How would Kangra deal with added potential environmental risks, whilst not having successfully demonstrated to this community that it can deal with current challenges?	2011/08/16	Email to Lisa Van Dongen	

C Ah Shene Verdoorn	Environmental Organisation	BirdLife South Africa	BirdLife South Africa noted to be opposed to environmentally harmful activities, especially mining in sensitive areas such as wetlands within Important Bird Areas (IBAs). The Proposed Project falls within an area identified by BirdLife South Africa as a global IBA, namely the Grassland Biosphere Reserve SA020. Birdlife South Africa is concerned by the environmental impacts of this proposed expansion that cannot be mitigated.	2011/08/22	Written comment	<p>be thoroughly aired and discussed through the process and that stakeholders are given the opportunity to meaningfully engage in the process of identifying and assessing impacts.</p> <p>It is proposed that a management plan including mitigation measures be developed as part of the EIA, where the environmental stakeholders will be given an opportunity to have input into this plan through the process.</p>
<b>Concerns Relating to Buildings and Infrastructure</b>						
General suggestion	Community Stakeholders	Kanluka community – Members of the CPA	Raised the concern that the underground mine will cause cracks in their aboveground structures. This was raised in the context of suggestions that these stakeholders would not need to relocate where underground mining was taking place.	2011/07/22	Meeting with Kanluka community	Mining design criteria have been established to eliminate the possibility of surface subsidence. The impacts of the underground mine on people at the surface will be explored further in the EIA.
A Steenkamp	Environmental Organisations	Birdlife South Africa: Wakkerstroom - Centre Manage	Noted that Wakkerstroom has already experienced negative impacts due to mining in the area particularly truck traffic on roads resulting in damage to the roads	2011/07/21	Meeting with A Steenkamp	There will be no increase in the number of coal haulage trucks on the road. Coal will be transported from the new facilities to the existing facilities by an extension of the current conveyor system.
<b>Miscellaneous</b>						
CL Greyling	Neighbouring landowner	Neighbouring landowner	Noted that he is fully aware of EIA processes and the potential (negative) impacts of mining projects	2011/07/21	Meeting with CL Greyling	Noted. CL Greyling was invited to be involved in the process.

Chief Moloji	Traditional Authorities	Traditional Authority	Request for private meeting or a discussion with Kangra Coal regarding royalties.	2011/07/29	Meeting with Chief Moloji	This falls outside the scope of the process. Compensation associated with physical or economic resettlement will be determined through a separate process. The process will, however, identify and assess the benefits of the proposed project through the EIA.
Teboho Klonderboy	Public	Member of the Public	Asked whether people with disabilities will be welcomed onto the project.	2011/07/29	Written comment	<p>A representative of Kangra Coal has confirmed that the facilities have been designed to accommodate people with physical disabilities.</p> <p>ERM replied in an email stating that the PPP would also consider the needs of people with disabilities. For example, the building used for the public meeting would have appropriate facilities for access.</p>