BCR COAL (PTY) LTD – VLAKFONTEIN COAL MINE

SOCIAL IMPACT ASSESSMENT: BASELINE REPORT

Submitted to:

Environmental Management Assistance (Pty) Ltd

Submitted by:

Batho Earth

Social and Environmental Consultants

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GLOSSARY OF ABBREVIATIONS

CV's:	Curriculum Vitae
EAP:	Environmental Assessment Practitioner
EIA:	Environmental Impact Assessment
EMPr:	Environmental Management Programme
EMF:	Environmental Management Framework
GDP:	Gross Domestic Product
GSD:	Gert Sibande District
GSDM:	Gert Sibande District Municipality
GVA:	Gross Value Added
Ha:	Hectares
HR:	Human Resources
I&APs:	Interested and Affected Parties
IDP:	Integrated Development Plan
MLM:	Msukaligwa Local Municipality
MPRDA:	Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002)
NEMA:	National Environmental Management Act, 1998 (NEMA) (Act 107 of 1998)
NWA:	National Water Act, 1998 (NWA) (Act 36 of 1998).
Ptn	Portion
SDF:	Spatial Development Framework
SIA:	Social Impact Assessment
StatsSA:	Statistics South Africa

DOCUMENT STATUS

SOCIAL IMPACT ASSESSMENT: Baseline Report: Final	
Date:	**4 August 2022**
Author:	**Ms. Sibongile Bambisa** **Ms. Ingrid Snyman: Batho Earth**

EXECUTIVE SUMMARY

Introduction

Environmental Management Assistance (Pty) Ltd. was appointed by BCR Coal (Pty) Limited as Environmental Assessment Practitioner (EAP) to undertake the process to obtain the necessary Environmental Authorisations for the proposed BCR Coal Vlakfontein Mine in the Mpumalanga Province.

The proposed mine will be situated on Portion (Ptn) 2, Ptn 11 and Ptn 21 of the farm Vlakfontein 108 IT; Ptn1, 7, 14, and 12 of the farm Welgelegen 107 IT. The application area comprises 1301.44 ha with 397 ha thereof being allocated to the actual mining activities. The proposed site falls within Ward 14 of the Msukaligwa Local Municipality (MLM) with the distance and direction from nearest towns being: 5 km south-east of Breyten, 7,5 km south-west of Chrissiesmeer and 14,5 km north-east of Ermelo.

The surface sub-outcrop of the coal seams is planned to be mined using an advancing open pit mining method which allows for concurrent filling of the pit. The pit will be used to develop portals which will allow the remainder of the ore to be exploited using underground mining methods. The open pit planned applies a conventional opencast truck and shovel mining philosophy.

In terms of sections 24(5)(a), (h) and 44 of the National Environmental Management Act (NEMA) (Act. No. 107 of 1998) and the protocol stipulated in GN 320 GG 43110 dated 20 March 2020, a site sensitivity verification is required as part of the Environmental Authorisation Processes.

A Social Assessment has been identified in terms of the Screening Report required to be conducted as part of the Environmental Authorisation Process. The general protocol requires that the socio-economic characteristics of the site and receiving environment be verified to determine the level of assessment required to identify the social impacts and risks associated with the proposed development.

This report serves as the socio-economic site sensitivity verification, and was undertaken through the following:

- a desk top analysis, using satellite imagery (e.g. Google Earth);
- a preliminary on-site inspection; and
- any other available and relevant information pertaining to the area and the study.

Thus, as part of the process, the baseline social assessment and site sensitivity screening aim to determine and provide information with regards to the following:

- Status quo social setting including the current socio-economic status of the area and the social characteristics of the receiving environment;
- Site sensitivity;
- Anticipated social impacts and risks involved with the proposed development;
- Social sensitive receptors and/or areas;
- Possible anticipated social impacts associated with proposed development;
- The findings, recommendations and conclusions of the social baseline study;
- Issues that should be considered during the EIA phase of the project; and

- The approach in terms of future social studies to be undertaken as part of the detailed assessment (Phase 2).

The receiving social environment

The study area falls within the Gert Sibande District Municipality (GSDM) and Msukaligwa Local Municipality's (MLM) area of jurisdiction. Ward 14 is the affected ward. The area and land-uses surrounding the proposed site is characterised by agriculture, some mining related activities and infrastructure, as well as roads and telecommunication infrastructure. The wetlands area of Chrissiesmeer is to the northeast of the study area and the town of Breyten is situated to the northwest of the proposed mining area.

The MLM has a typical rural population distribution with some concentrated nodes, making it difficult to supply the rural areas with sufficient services. These households outside of the nodes are scattered across a wide spatial area with low population densities. On the other hand, area of Ermelo/Wesselton is facing the pressure of rapid urbanisation causing pressure on service delivery in the urban node.

The MLM is characterised by increased poverty levels, and a population with relatively low skills levels and overall declining functional literacy. The number of households without any form of income or very low levels of income remain of concern.

The percentage of youth under the age of 18 years comprises approximately a third of the the local population profile, which makes job creation a critical need. The area has a low percentage of individuals that completed Grade 12 and significantly lower levels of individuals that have a higher education. A lack of relevant skills among locals can result in employers still recruiting outside the local municipal areas.

The infrastructure in the larger study area and within the MLM is fairly poor, with major service backlogs that cannot meet the needs of the dispersed human settlements and high poverty levels.

Desktop Verification Outcome

- Possible social impacts refer to the population and demographic changes, socio-economic intrusions, safety and security impacts, employment and procurement, impacts on infrastructure and services, possible external costs, impact on the sense of place and the distribution of social funding. These impacts were outlined in Section 7 (Table 19).
- The site sensitivity is deemed moderate to high from a socio-economic perspective, mainly based on the extent of the development, the agricultural land-sue and the location of the site to the Chrissiesmeer area (Refer to Section 5 and Section 6: Table 18).
- The social impacts and risks associated with the proposed mining activities are at this stage deemed moderate to high. Moderate impacts can be mitigated, but those deemed high would be difficult to avoid, mitigated and/or managed (Refer to Section 7: Table 19).
- Due to the impact on the agricultural resource use on the affected properties, the socio-economic impact in this regard is considered to be high. This type of impact cannot be successfully mitigated, apart from the financial compensation process.
- The proposed mining activity can also result in positive impacts on the environment with flow-on positive impacts on the socio-economic environment such as direct and indirect

employment, increased tax income and availability of social funds for socio-economic development.

- No formal engagements or meetings with stakeholders have been conducted to date. It is anticipated that different responses and opinions regarding the project will be submitted throughout the process. It is highly likely that local unemployed community members in the study area will have a positive attitude towards the project due to the high unemployment figures in the affected ward and in the local municipal area that emphasises the need for employment creation (Also refer to the discussion under Section 5.4 with regards to employment and income). Other initial responses to the project by the some of the adjacent landowners in the study area indicate that there are some form of attitude formation. These relate to possible negative impacts on the land- and resource use, intrusions on the rural character of the area and possible devaluation of the property values, together with concerns regarding the possible negative environmental impacts.
- Initial issues and opinions already raised should thus be noted. These should further be considered in terms of future community involvement and stakeholder engagement as part of the public participation process to be undertaken and during the detailed impact assessment phase..

Reasoned Opinion regarding the acceptability of the proposed project

Based on the outcome of the baseline assessment, social screening and site verification (Section 6: Table 18: Anticipated socio-economic impacts and risks and Section 7: Table 19), it was concluded that various socio-economic impacts of a moderate to high significance might occur as a result of the proposed mining activities. The socio-economic impacts on the existing landowners will be high (negative), due to the loss in the land- and resource use. This will be difficult to mitigate.

Negative impacts of a more moderate significance refer to demographic changes, nuisance factors, safety and security issues, increased pressure on public infrastructure and services, external costs (e.g. negative impacts on land-use, groundwater, air quality, biodiversity, traffic, road infrastructure, health and community safety) associated with mining, as well as the impact on the sense of place. At this stage, it is concluded that these impacts can be managed and mitigated to some extent.

Positive impacts refer to employment and income due to the operation itself and due to supply-links with local suppliers, as well as possible job creation for low-income groups throughout the life of mine, availability of social funds for socio-economic development and subsequent positive impact on poverty levels. The positive impacts can be enhanced.

Recommendations and Further Studies

Based on the above interim conclusions, it is recommended that a detailed Social Impact Assessment be undertaken during the next phase of the Environmental Authorisation process. This will allow for more in-depth studies and the assessment of the significance of the impacts according to an Assessment Framework that will consider the nature, extent, duration, the intensity and probability of the impacts.

The mitigation and management measures proposed would culminate in the development of a Social Management Plan (SMP). The aim of the SMP is to provide a plan for the implementation of mitigation and future monitoring and management measures with regards to the possible impacts on the socio-economic environment. This would enable all those responsible for implementation (e.g. the project developer/applicant, communities, government institutions and so forth) to implement their relevant management action plans and processes, as well as establish communication channels to successfully and jointly deal with the project impacts and risks, and to maintain an ongoing role in monitoring these.

1. INTRODUCTION

1.1 Background

BCR Coal (Pty) Ltd[1] is proposing an open pit mining operation, namely the BCR Coal Vlakfontein Mine[2]. The proposed mining site is located 5 km south-east of Breyten, 7,5 km south-west of Chrissiesmeer and 14,5 km north-east of Ermelo in Mpumalanga Province.

The proposed mine will be situated on Portion (Ptn) 2, Ptn 11 and Ptn 21 of the farm Vlakfontein 108 IT; Ptn1, 7, 14, and 12 of the farm Welgelegen 107 IT. The application area comprises 1301.44 ha with 397 ha thereof being allocated to the actual mining activities.

A Social Assessment has been identified in terms of the Screening Report required to be conducted as part of the Environmental Authorisation Process. The general protocol requires that the socio-economic characteristics of the site and receiving environment be verified to determine the level of assessment required to identify the social impacts and risks associated with the proposed development.

1.2 Social Impact Assessment

The International Principles for Social Impact Assessment (SIA) defines SIA as being "the processes of analysing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions" (IAIA: 2015).

Burdge (1995) describes a SIA as the "…systematic analysis in advance of the likely impacts a development event (or project) will have on the day-to-day life (environmental) of persons and communities." Burdge and Vanclay (1995) consider that social impacts are "all social and cultural consequences to human populations of any public or private actions that alter the ways in which people live, work, play, relate to one another, organize to meet their needs, and generally cope as

[1] Hereafter referred to as the applicant or BCR Coal.

[2] Hereafter referred to as Vlakfontein Mine

members of society", including "changes to the norms, values, and beliefs of individuals that guide and rationalize their cognition of themselves and their society."

Vanclay (2003) identified three primary reasons for undertaking SIAs, namely:

- SIA is a part of the democratic process that can assist in ensuring equity and transparency of decision-making;
- SIA is a form of assessment whereby the identification of the likely impacts of developments are assessed to ensure that future benefits will outweigh the costs of a proposed project; and
- By using a participatory process, SIA can lead to better decision-making by accessing and incorporating local knowledge.

A SIA can be applied to determine anticipated impacts with regards to a planned development, but it can also be used to assess the impacts of existing facilities or infrastructure.

A SIA is focused on the human dimensions of the environment, as it aims to balance social, economic and environmental objectives and seeks to predict, anticipate and understand the potential impacts of development. It aims to engage communities or to achieve the best outcomes for society in terms of sustainable development, or even good project design.

The SIA can assist the project proponent to conceptualise and implement a project in a manner which would see the identified negative social impacts addressed through avoidance or mitigation (e.g. improving the design) and the positive impacts realised and optimised. It would also allow the community to anticipate, plan for and deal with the social changes once they come into effect. In this sense then, the SIA is an indispensable part of the Environmental Impact Assessment (EIA) processes, the Environmental Management Program (EMP) and any participative activity (e.g. community involvement in mitigation and monitoring during planning and implementation).

The SIA can further assist in assessing and managing social issues of operational projects and/or facilities and infrastructure throughout the life of such projects/facilities/infrastructure and in the event of closure planning. Through ongoing assessment, any project related changes can be addressed using best practices in adaptive management.

1.3 Purpose of the Report

In terms of sections 24(5)(a), (h) and 44 of the National Environmental Management Act (NEMA) (Act. No. 107 of 1998) and the protocol stipulated in GN 320 GG 43110 dated 20 March 2020, a site sensitivity verification is required as part of the Environmental Authorisation Processes.

The current land-use and the socio-economic sensitivity of the site under consideration must thus be confirmed by undertaking a social assessment (screening) and site sensitivity verification.

The socio-economic site sensitivity verification was undertaken through the following:

- a desk top analysis, using satellite imagery (e.g. Google Earth);
- a preliminary on-site inspection; and
- any other available and relevant information pertaining to the area and the study.

Thus, as part of the process, the baseline social assessment and site sensitivity screening aim to determine and provide information with regards to the following:

- Status quo social setting including the current socio-economic status of the area and the social characteristics of the receiving environment;
- Site sensitivity;
- Anticipated social impacts and risks involved with the proposed development;
- Social sensitive receptors and/or areas;
- Possible anticipated social impacts associated with proposed development;
- The findings, recommendations and conclusions of the social baseline study;
- Issues that should be considered during the EIA phase of the project; and
- The approach in terms of future social studies to be undertaken as part of the detailed assessment (Phase 2).

1.4 Specialist Details

The Baseline Social Report was prepared by Ms. Sibongile Bambisa and Ms. Ingrid Snyman of Batho Earth.

Ms. Sibongile Bambisa is a social scientist with 12 years' experience with a keen interest on projects and initiatives that promote meaningful consultation. She has been actively involved in designing and implementing sustainable social interventions for various projects within Southern Africa. Her background in Anthropology and ability to speak different local languages adds value on projects and ensure effective communication and liaison with different communities and stakeholders

Ms. Ingrid Snyman holds a BA Honours degree in Anthropology. She has 20+ years' experience in the social field. Ms. Snyman has been involved in various Social Impact Assessments during her career as social scientist. These project themes consist of infrastructure development, waste management, road development, water and sanitation programmes, township and other residential type developments. She has also been involved in the design and management of numerous public participation programmes and communication strategies, particularly on complex development projects that require various levels and approaches.

1.5 Declaration of Independence

A declaration of independence and CVs of Ms. Sibongile Bambisa and Ms. Ingrid Snyman is attached as part of Appendix A.

1.6 The Proposed Project

1.6.1 Project Location

The proposed project is located within the jurisdiction of the Gert Sibande District Municipality (GSDM) and Msukaligwa Local Municipality (MLM) in Mpumalanga Province. The proposed site

falls within ward 14 of the MLM with the distance and direction from nearest towns being: 5 km south-east of Breyten[3], 7,5 km south-west of Chrissiesmeer and 14,5 km north-east of Ermelo.

The following farms form part of the application: Portion (Ptn) 2, Ptn 11 and Ptn 21 of the farm Vlakfontein 108 IT; Ptn1, 7, 14, and 12 of the farm Welgelegen 107 IT. The portion to the east of the N17 forms part of the mining right application, but no mining activities will be undertaken within that section and no infrastructure would be required on that section of the application.

[3] The MLM SDF refers to Breyten/KwaZanele; Chrissiesmeer/KwaChibikhulu. For purpose of consistency and for this report, it was referred to as Breyton and Chrissiesmeer.

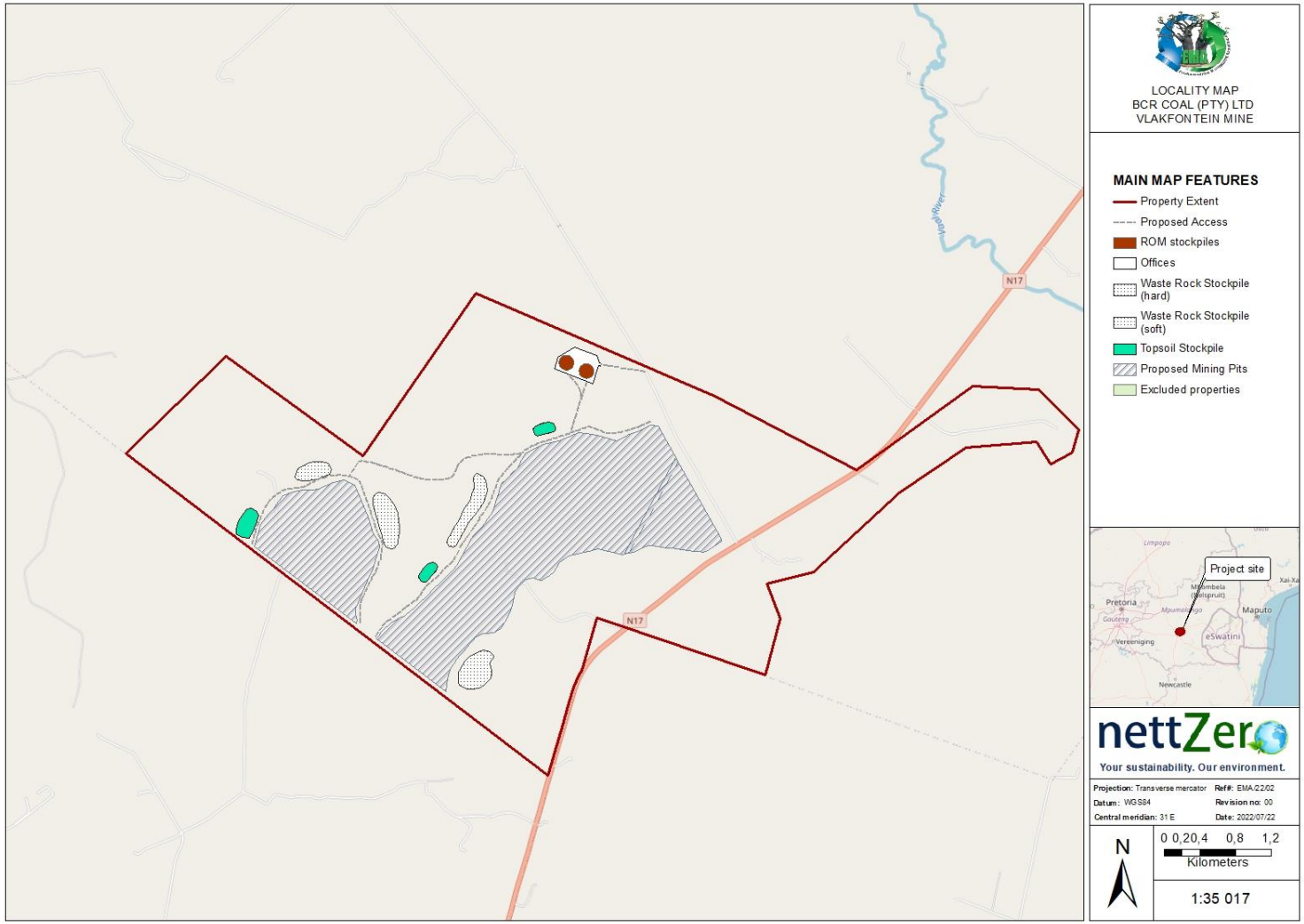


Figure 1: Project Location

The directly affected properties are listed in Table 1.

Table 1: Directly affected properties

Farm name	Portion	Extent (Ha)	Owner
Vlakfontein 108 IT	2	1063	Susanna Boerdery CC
Vlakfontein 108 IT	21	9	Chaldean Trading 46 (Pty) Ltd
Vlakfontein 108 IT	11	251	Chaldean Trading 46 (Pty) Ltd
Welgelegen 107 IT	1	288	WPCH Trust
Welgelegen 107 IT	7	262	WPCH Trust
Welgelegen 107 IT	12	97	Susanna Boerdery CC
Welgelegen 107 IT	14	514	WPCH Trust

1.6.2 Technical Background

The details of the identified mineral deposit is indicated below:

Table 2: Resource Particulars

Item	Detail
Type of Mineral	Coal
Extent of the area required for mining	1301.4 Ha (397 Ha Mining)
Extent of the area required for infrastructure, roads, servitudes etc.	Approximately 25 Ha
Depth of mineral below surface	< 100m
Geological Formation	Main Karoo Basin (MKB) Vryheid Formation

The surface sub-outcrop of the coal seams is planned to be mined using an advancing open pit mining method which allows for concurrent filling of the pit. The pit will be used to develop portals which will allow the remainder of the ore to be exploited using underground mining methods. The open pit planned applies a conventional opencast truck and shovel mining philosophy including the following steps:

- Removal of topsoil and storing it at a designated position;
- Removal of the overburden;
- Drilling and blasting will be required to break the hard overburden;
- The waste will be dumped in the pit behind the advancing face where possible with the remainder placed at the designated waste rock stockpile, separate from the topsoil;
- Drilling and blasting of the coal seams;
- Loading and hauling of the ore for stockpiling at the Run-of-Mine (ROM) pad and for transport to the preferred Washing Plant.

1.6.3 Proposed infrastructure

The infrastructure requirements and support facilities will include:

- Access and haul roads (with necessary security) including the upgrading of the access point to the mining area;
- Contractor's yard with septic/chemical ablution facilities;
- Offices;
- Weighbridge, workshop and stores (with septic/chemical ablution facilities);
- Diesel facilities and a hardstand;
- Power and Water;
- Stockpiles (topsoil, overburden (waste), subsoil/softs, ROM);
- Crushing and screening facility;
- Surface water management measures (stormwater diversion berms and trenches; pollution control dams etc);
- Medical station; and
- Diesel Generator

The open pit mining philosophy is based on a contractor-operated operation. A production shift cycle operating 9 hours a day, 6 days a week will be adopted. The open pit layout and the life of mine schedule is presented in below:

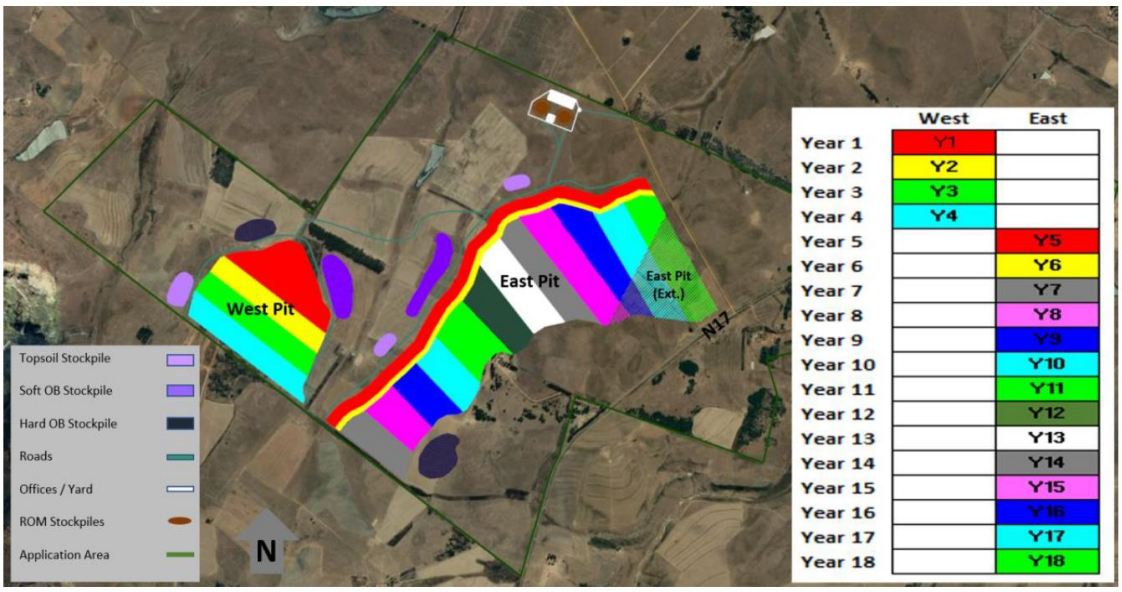


Figure 2: Proposed BCR Coal Vlakfontein Mine layout and LoM schedule

1.6.4 Construction Phase

The construction phase will commence upon granting of a mining right and will include the activities outlined in Table 3.

Table 3: Activities anticipated during construction

Activity	Proposed time frame
Preparation of Access Roads	3 Weeks
Construction of contractor's yard	1 Week

Activity	Proposed time frame
Workshop Construction	3 Weeks
Fencing and trenching of Mining Area	4 Weeks
Construction of Security (Boom Gates, Security house)	4 Weeks
Installation of Weighbridge	3 Weeks
Construction of Diesel bunds and Installation of Tanks	2 Weeks
Construction of Mine haul roads	4 Weeks
Development of trenches and pollution control facilities	8 Weeks
Setting up crushing and screening plant	8 weeks

1.6.5 Operational Phase

The mining method will include the following main mining activities for both overburden and coal:

- Topsoil and soft overburden removal;
- Drilling of hard overburden material;
- Charging and blasting;
- Loading and hauling; and
- Tipping or dumping.

2. LEGAL REQUIREMENTS AND GUIDELINES

2.1 Applicable legislative framework

The following table summarises some of the main legal framework, legal requirements and policy guidelines within which SIAs are undertaken and which must be considered in the compilation of SIAs.

Table 4: Relevant Legislation

Act	Description
Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996)	Section 24 of the Constitution of the Republic of South Africa states that everyone has the right to an environment that is not harmful to their health or well-being; and to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development. A comprehensive SIA process whereby the potential socio-economic impacts associated with the project are identified and where management measures are prescribed to minimise negative impacts and enhance the project's contribution to socio-economic development, will be in line with Section 24 of the Constitution.
National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA)	NEMA is the overarching environmental legislation for the management of the environment in South Africa. The objective of the NEMA is to provide for co-operative environmental governance through a series of principles. It also provides a framework for sustainable development.

Act	Description
	The EIA Regulations of 2014, as amended, promulgated in terms of the NEMA, further prescribe the content of specialist assessments as well as the legal requirements for stakeholder engagement. The National Environmental Management Act (NEMA), 1998 (Act No 107 of 1998) and Environmental Impact Assessment Regulations (GN R982 of 04 December 2014, as amended) (EIA Regulations) provide a suite of principles and tools to guide South Africa on a path to sustainable development. "Environment' is defined in holistic terms and includes biophysical, social, and economic components, as well as the connections within and between these components. While the act does not prescribe a specific methodology in terms of SIA, it highlights the necessity to include socio-economic issues in EIAs.
Environmental Impact Assessment (EIA) Regulations, 2014 (GN R982 of 2014, as amended in June 2021)[4] **EIA Regulations Listing Notice 1 of 2014 (GN R983 of 2014, as amended)[5]** **EIA Regulations Listing Notice 2 of 2014 (GN R984 of 2014, as amended)[6]** **EIA Regulations Listing Notice 3 of 2014 (GN R985 of 2014, as amended)[7]**	The EIA Regulations determine that an Environmental Authorisation (EA) is required for certain listed activities prior to the commencement of a listed activity, which might have a detrimental effect on the environment. An EA application must be submitted to the relevant Competent Authority in terms of section 24 of the NEMA for consideration. The EIA Regulations prescribe various activities listed in 3 Listing Notices which must be consulted to determine the process to be followed. Various specialist assessments must be undertaken as part of the above processes to investigate potential impacts of proposed projects. Appendix 6 of the EIA Regulations of 2014, as amended, prescribes specifications with regards to specialist assessments.
Department of Forestry, Fisheries and the Environment (DFFE)[8] Screening Tool[9] **NEMA: Procedures for assessment and minimum criteria for reporting on identified environmental themes when applying for**	The DFFE requires that their Environmental Screening Tool be utilised prior to undertaking an application for any EA and that the screening report generated by the tool be submitted with the EA application as per Regulation 16(1)(b)(v) of the EIA Regulations (2014). The tool is a geographically based web-enabled application which allows a proponent intending to apply for an EA to pre-screen their proposed site for any environmental sensitivities. The screening report includes environmental themes and the sensitivity of each with regards to a specific site and also prescribe the specialist assessments which need to be undertaken.

[4] GN R982 of 4 December 2014 as amended by GN R326 of 7 April 2017, GN 706 of 13 July 2018, GN 599 of 29 May 2020 and GN 517 of 11 June 2021.

[5] GN R983 in GG 38282 of 4 December 2014 as amended by GN R327 in GG 40772 of 7 April 2017, GN 706 in GG 41766 of 13 July 2018 and GN 517 in GG 44701 of 11 June 2021.

[6] GN R984 in GG 38282 of 4 December 2014, as amended by GN R325 in 40772 of 7 April 2017 and GN 517 in GG 44701 of 11 June 2021.

[7] GN R985 in GG 38282 of 4 December 2014, as amended by GN R324 in 40772 of 7 April 2017, GN 706 in GG 41766 of 13 July 2018 and GN 517 in GG 44701 of 11 June 2021.

[8] Previously known as the Department of Environmental Affairs (DEA)

[9] https://screening.environment.gov.za/screeningtool

Act	Description
environmental authorisation (GN R320 of 2020)[10]	A notice in terms of procedures for assessment and minimum criteria for reporting on identified environmental themes when applying for EA was published by the DFFE under the sections 24(5)(a), (h) and 44 of the NEMA. This notice prescribes general requirements for undertaking site sensitivity verification where a specialist assessment is required and provides protocols for the assessment with minimum report content requirements for each environmental theme. Each protocol applies exclusively to the environmental theme identified within its scope. Multiple themes may apply to a single application for environmental authorisation, and assessments for these themes must be undertaken in accordance with the relevant protocol. The specialist protocols prescribe that an Applicant intending to undertake an activity identified in the scope of a specified protocol on a site identified by the screening tool as being of "medium sensitivity" for each environmental theme must submit either a full Specialist Assessment Report or a Compliance Statement, depending on the outcome of a site inspection. Similarly, an Applicant intending to undertake an activity identified in the scope of a protocol on a site identified by the screening tool as being of "low" sensitivity must submit a Compliance Statement. In terms of the undertaking a specialist assessment where no specific protocol has been prescribed, general requirements stipulated in Schedule A of the GN 320, where the required level of assessment must be based on the findings of the site sensitivity verification must be followed. There is no specific specialist protocol that guides SIAs; thus, a general protocol would apply, and the assessment would need to comply with Appendix 6 of the EIA Regulations.
Overview of Integrated Environmental Management (IEM) Information Series 0 (Department of Environmental Affairs and Tourism (DEAT)[11], 2004)[12];	Integrated Environmental Management (IEM) is a key instrument of South Africa's National Environmental Management Act (NEMA). IEM provides the overarching framework for the integration of environmental assessment and management principles into environmental decision-making. It includes the use of several environmental assessment and management tools that are appropriate for the various levels of decision-making. The aim of the IEM Information Series guideline is to provide general information on techniques, tools and processes for environmental assessment and management. The Socio-Economic Impact Assessment, Integrated Environmental Management Information Series 22 of the former DEAT (now DFFE) published in 2006, is a comprehensive reference document that can be used as guideline as it provides valuable information on the SIA process, research techniques and approaches, as well as practical guidance for SIA practitioners. The series guidelines relevant to SIAs are provided below.
Integrated Environmental Management (IEM) Information Series 4: Specialist Studies	The focus of this document is to provide a guideline on the specialist study phase of the EIA process, over and above the legislated specialist protocols: • Defining the scope of work.

[10] GN R 320 in GG 43110 of 20 March 2020

[11] Now known as the DFFE

[12] DEAT (2004) Overview of Integrated Environmental Management, Integrated Environmental Management, Information Series 0, Department of Environmental Affairs and Tourism (DEAT), Pretoria

Act	Description
(Department of Environmental Affairs and Tourism (DEAT), 2002)[13]; **Integrated Environmental Management (IEM) Information Series 22: Socio-Economic Impact Assessment (Department of Environmental Affairs and Tourism (DEAT), 2006)[14]**	• Establishing baseline environmental conditions. • Field surveys and data collection. • Identifying and predicting potential impacts. • Prescribing mitigation measures and their implications. • Implementing monitoring requirements A separate guideline document is also available for Socio-Economic Impact Assessments. This document describes the background to Socio-economic Impact Assessment (SEIA) and introduces the reader to the concept of SEIA and how it forms part of IEM. The aim of SEIA is to understand the current social and economic environment and use it as a baseline for predictions and measurements.
South African Mining Charter, 2018	The vision of the South African Mining Charter is to facilitate sustainable transformation, as well as growth and development of the mining industry. It has the following objectives: • To promote equitable access to the nation's mineral resources to all the people of South Africa, • To expand opportunities substantially and meaningfully for Historically Disadvantaged South Africans (HDSA) to enter the mining and minerals industry and to benefit from the exploitation of the nation's mineral resources, • To promote employment and advance the social and economic welfare of mine communities and major labour sending areas; • To promote beneficiation of South Africa's mineral commodities; and • To promote sustainable development and growth of the mining industry.
Mineral and Petroleum Resource Development Act, 2002 (Act No. 28 of 2002)	The Mineral and Petroleum Resource Development Act (MPRDA) is the central Act governing mining in South Africa and the preamble to the MPRDA affirms the State's obligation to protect the environment for the benefit of present and future generations, to ensure ecologically sustainable development of mineral and petroleum resources, and to promote economic and social development. Section 10 of the Act provides for consultation with interested and affected parties and the process which must be followed.

2.2 Requirements for Specialist Reports

Appendix 6 of the EIA Regulations of 2014, as amended, prescribes specifications with regards to specialist assessments.

[13] DEAT (2002) Specialist Studies, Information Series 4, Department of Environmental Affairs and Tourism (DEAT), Pretoria.

[14] DEAT (2006) Socio-Economic Impact Assessment, Integrated Environmental Management Information Series 22, Department of Environmental Affairs and Tourism (DEAT), Pretoria

Table 5: Requirements for specialist reports: EIA Regulations (2014)

EIA REGULATIONS 2014 GNR 982 Appendix 6 CONTENT OF THE SPECIALIST REPORTS	Status / Cross-reference in this Report
a) details of the specialist who prepared the report; and the expertise of that specialist to compile a specialist report including a curriculum vitae;	Section 1.4
b) a declaration that the specialist is independent in a form as may be specified by the competent authority;	Appendix A
c) an indication of the scope of, and the purpose for which, the report was prepared	Section 1.3 and 3
cA) an indication of the quality and age of base data used for the specialist report	Section 3 and 4
cB) a description of existing impacts on the site, cumulative impacts of the proposed development and levels of acceptable change	Section 5 and 6
d) the duration, date and season of the site investigation and the relevance of the season to the outcome of the assessment;	Section 3
e) a description of the methodology adopted in preparing the report or carrying out the specialised process inclusive of equipment and modelling used;	Section 3
f) details of an assessment of the specific identified sensitivity of the site related to the proposed activity or activities and its associated structures and infrastructure, inclusive of a site plan identifying site alternatives;	Section 5 and 6
g) an identification of any areas to be avoided, including buffers;	To be included as part of detailed study
h) a map superimposing the activity including the associated structures and infrastructure on the environmental sensitivities of the site including areas to be avoided, including buffers	To be included as part of detailed study
i) a description of any assumptions made and any uncertainties or gaps in knowledge;	Section 4
j) a description of the findings and potential implications of such findings on the impact of the proposed activity or activities;	Section 6
k) any mitigation measures for inclusion in the EMPr	To be included as part of detailed study
l) any conditions for inclusion in the environmental authorisation;	To be included as part of detailed study
m) any monitoring requirements for inclusion in the EMPr or environmental authorisation;	To be included as part of detailed study

EIA REGULATIONS 2014 GNR 982 Appendix 6 CONTENT OF THE SPECIALIST REPORTS	Status / Cross-reference in this Report
n) a reasoned opinion • whether the proposed activity, activities or portions thereof should be authorised; • regarding the acceptability of the proposed activity or activities; and • if the opinion is that the proposed activity, activities or portions thereof should be authorised, any avoidance, management and mitigation measures that should be included in the EMPr, and where applicable, the closure plan;	Section 8
o) a description of any consultation process that was undertaken during the course of preparing the specialist report;	Included as part of the Public Participation Process
p) a summary and copies of any comments received during any consultation process and where applicable all responses thereto; and	None
q) any other information requested by the competent authority	N/A
2) Where a government notice gazetted by the Minister provides for any protocol or minimum information requirement to be applied to a specialist report, the requirements as indicated in such notice will apply.	N/A

3. SCOPE OF WORK AND METHODOLOGY

3.1 Site Visit

Batho Earth undertook a site visit on 05 July 2022 as part of the of site verification process, to gain a better understanding of the socio-economic context of the area and gather information to support the desktop research.

The site visit was useful in order to compile the site characterisation and to determine the surrounding land-uses in the area. It assisted in obtaining more information on the localised setting and site sensitivity, local settlements and communities and their proximity to the project, as well as those that are likely to be impacted or those that were affected and other stakeholders. The vulnerability of the possibly affected communities and sensitive receptors can thus be determined during the site visit.

3.2 Scope of the Assessment

This involves an investigation to identify the framework of the project through the identification and demarcation of the study area. Once the study area has been determined, an evaluation framework was developed which assisted in identifying the main anticipated social impacts. For this study, it aimed to:

- Consider the extent of the proposed project and social environment within which the project will be placed and accordingly identify the potential social impacts/ risks that are likely to arise as a result of the proposed project;

- Compile a detailed socio-economic baseline profile;
- Undertake a site sensitivity verification to confirm the current land use and environmental sensitivity of the proposed project area as identified by the Environmental Screening Tool.

3.3 Literature Review, Analysis and Desktop Studies

The literature review assisted the consultants to establish the social setting and characteristics of the study area, as well as the key economic activities. Secondary data, which was not originally generated for the specific purpose of the study, were gathered and analysed for the purposes of the study.

A review of available documents was undertaken to obtain information regarding the baseline socio-economic conditions of the project area. Documents reviewed include the following:

- Integrated Development Plans (IDPs) and Spatial Development Frameworks (SDF) of the affected local and district municipalities (GSDM and MLM);
- Socio-economic and demographic statistics (sourced from Statistics South Africa's 2001 and 2011 Census data); and
- Available maps and satellite imagery.

3.4 Profiling

Profiling involves a description of the social characteristics and history of the area being assessed, an analysis of demographic data, changes in the local population, and the land-use pattern in the study area, as well as any other significant developments in the area and thus social character over time. The profiling process is a combination of secondary and primary research and the site visit.

The broad profiling will typically include descriptions regarding the following:

- The social trends and current conditions;
- The land-use in the area;
- The demographical profile and social characteristics of the host community e.g. population and household size; age and gender profile; access to basic services; education profile; dwelling units; tenure status type; employment status; sector of employment; and household income levels;
- Culture, attitudes and socio-psychological conditions (e.g. attitude formation and evidence of previous protest actions);
- Community and institutional structures;
- Community resources;
- Land-use in the area (e.g. agricultural, business/commercial, open veld, recreational areas, nature conservation areas, cultural and heritage sites, residential etc.);
- Challenges, strength and weaknesses of the communities;
- Other potential developments in the area (to assess cumulative impacts);
- Local and regional economy;
- Local economic networks;
- Economic development initiatives in the local area; and
- Past community experiences with projects in the area.

The baseline conditions refer to the local social context prior to development being implemented.

3.5 Social Screening

On completion of the baseline assessment, social screening was undertaken to assess and analyse the data about the socio-economic environment to determine possible sources of impact and risks. It forms part of the process of identifying important cause-and-effect relationships and a comparative framework for anticipated changes and impacts.

4. GAPS, LIMITATIONS AND ASSUMPTIONS

With regards to the Baseline Social Assessment and Social Screening undertaken, the following should be noted:

- Information included in this report is solely based on desktop data and supplemented by observations made during the site visit. Directly affected landowners, land occupiers and interested parties where not engaged as Phase 1 of the project and SIA.
- The social assessment aims to identify possible socio-economic impacts that could occur in future. These impacts are based on existing baseline information. There is thus always an uncertainty with regards to the anticipated impact actually occurring, as well as the intensity thereof. Impact predictions have been made as accurately as possible based on the information available at the time of the study.
- Sources consulted are not exhaustive and additional information can still come to the fore to influence the contents, findings, ratings and conclusions made.
- Socio-economic baseline information was mainly based on official statistics from StatsSA, as well as municipal documentation. Sub-municipal data and the socio-economic baseline data for Ward 14 was only available for 2011. The lack of more recent official socio-economic data is therefore seen as a limiting factor as it is outdated, although it is not anticipated to influence the outcome of the report.
- Technical and other information provided by the EAP is assumed to be correct.

5. DESCRIPTION OF THE BASELINE ENVIRONMENT

5.1 General Description of the Study Area

The study area is defined as a geographical area within which social and environmental studies are completed to determine direct, indirect and cumulative impacts attributable to the project.

The following sections provide a description of the socio-economic conditions within the identified project study area, which will be used to inform the Social Impact Assessment (SIA).

5.1.1 Regional Context

Mpumalanga is the second smallest province in South Africa and is located in the north-eastern part of the country, bordering Swaziland and Mozambique. Mpumalanga covers an area of 76 495km² and has a population of 4 335 964, making it one of the most populous provinces in the country.

As per the Community Survey, 2016 (Stats SA, 2016) the province's number of households were 1 238 861. The population of Mpumalanga has grown at an annual rate of 1.63% p.a. between 2011 and 2018, which is higher than the national average of 1.57% (Mpumalanga SDF, 2019).

The province is rich in coal reserves and home to South Africa's major coal-fired power stations (eMalahleni is the biggest coal producer in Africa). Mpumalanga is known for its mining, manufacturing, forestry and service sectors. The tourism and agro-processing sectors have shown major growth potential over the years. Agriculture in Mpumalanga is characterised by a combination of commercial and subsistence farming practices.

The Maputo Corridor, which links Mpumalanga with Gauteng and Maputo in Mozambique, harbours extensive potential in terms of economic development and growth for the region. The N17 also is an important transport corridor linking Gauteng with Kwa Zulu Natal through the southern part of Mpumalanga.

The five primary nodes where developments are to be concentrated in the province are Witbank/ Emalahleni, Middleburg, Mbombela/ Nelspruit, Secunda and Ermelo.

The following focus areas were identified with regard to mining and energy related development in the province: (i) facilitate and accommodate the existing mining sector, (ii) develop industries that will serve coal mines in towns like Ermelo and Standerton, (iii) proper rehabilitation of mines after use, (iv) establish proper environmental management systems during the operational stage of mines, (v) strengthening of the Richards Bay coal line rail freight corridor (Mpumalanga SDF, 2019).

5.1.2 Gert Sibande District Municipality

The GSDM is the largest of the three districts in Mpumalanga Province at 31 841 km², covering 40% of the Mpumalanga Province's land mass. The Gert Sibande District (GSD) contributes 26.2% towards the provincial population (Mpumalanga SDF, 2019).

- The GSDM comprises of the following local municipalities:
- Chief Albert Luthuli Local Municipality;
- Dipaleseng Local Municipality;
- Dr Pixley Ka Isaka Seme Local Municipality;
- Govan Mbeki Local Municipality;
- Lekwa Local Municipality;
- Mkhondo Local Municipality; and
- MLM.

The following key issues can be noted:

- According to Stats SA (2016 Community Survey), the GSDM's population increased from 1,043 194 in 2011 to 1,135 409 people in 2016, making it the smallest population among the districts in the province.
- In 2016, the youth population (15-34 years) comprises 39.3% of the total population.
- In 2016, the female population's share was 50.3% and that of males 49.7%.

- The population increased by 92 215 between 2011 and 2016, which is a population growth rate of 1.9% per annum between 2011 and 2016. This was higher than the annual average economic growth of 1.1% p.a.
- The population was estimated to reach a total of 1, 263 786 or 26.6% of Mpumalanga's population in 2021. The projection for 2030 is approximately 1.31 million or 25.7% of Mpumalanga's population. Such population growth will place additional pressure on infrastructure and service delivery as well as economic and employment opportunities.
- The number of households in the GSDM increased from 273 490 in 2011 to 333 815 households (± 60 000 household increase) in 2016 which constitutes 26.9% of Mpumalanga's households. The household size declined from 3.8 to 3.4 between 2011 and 2016. The projected household figure for 2030 is approximately 467 200 households.

The main economic sectors of the district include.

- Manufacturing (49.4%);
- Agriculture (38.1%);
- Transport (31.4%);
- Trade (29.2%);
- Community services (26.9%);
- Construction (26.6%);
- Electricity (26.1%);
- Finance (23.8%); and
- Mining (23.3%).

The proposed BCR Vlakfontein coal mine project links into the District's intention to mining and energy related development. According to the Mpumalanga SDF (2019), the GSDM is committed to:

- Facilitating and accommodating the existing mining sector;
- Developing industries that will serve coal mines in towns like Ermelo and Standerton;
- Ensuring proper rehabilitation of mines after use;
- Establishing proper environmental management systems during the operational stage of mines; and
- Strengthening of the Richards Bay coal line rail freight corridor.

5.1.3 Msukaligwa Local Municipality

The MLM is a predominantly rural area, covering 6016 km^2. The municipality has a total population of approximately 164 608 people with a relatively low population density of 27.3 people per square kilometre.

MLM is one of the seven local municipalities within the GSD and the main settlements include Ermelo/Wesselton; Breyten/KwaZanele; Chrissiesmeer/KwaChibikhulu; Davel/KwaDela; Warburton/Nganga; Lothair/Silindile; and Sheepmoor (Msukaligwa SDF, 2019).

The towns nearest to the proposed development are Ermelo to the south, Breyten to the northwest, and Chrissiesmeer to the northeast.

Ermelo/Wesselton is the highest order urban settlement in MLM, located at a central point to a range of regional routes (road and rail) including the N17, N11 and N2. Ermelo is regarded as a key economic growth and innovation centre with a focus on mining, transport/logistics and agriculture. It is also defined as a regional service centre that should provide high level social services to surrounding areas. MLM is set to play an increasingly important role in provincial connectivity and corridor development, with Ermelo as a central node for a number significant existing and future corridors (freight rail, passenger transport, road transport) (Msukaligwa SDF, 2019).

Information from the 2010 Msukaligwa Environmental Management Framework (EMF) indicated that there were 33 mines within the municipal area, of which 55% were located around Ermelo and between Ermelo and Breyten. This EMF further noted that six of these mines were located around Chrissiesmeer within close proximity to the sensitive lakes district. There was also some sand mining and quarrying taking place for road materials (Msukaligwa SDF, 2019).

Chrissiesmeer/Kwachibikhulu has been identified as a tourism node within the larger municipal area. This is mainly due to Chrissiesmeer situated at a very large natural body of fresh water that has a circumference of 25 km, and expands 1500 ha. These pans do not have inlet or outlets, it is only rainwater that fills it (www.chrissiesmeer.co.za).

Breyten was established as a railway town. Common freight was agricultural produce and livestock, but most predominantly coal from the local collieries. Due to losses in the manufacturing sector, the town has since experienced high unemployment. Breyten/Kwazanele continues to be a mining community, with the majority of the population still employed in collieries such as the Tselentis and Spitzkop Collieries of the Imbawula Group. The town does not have a very diverse economic base and the key activities revolve around mining related activities, agriculture and retail. The R36 runs through the town and links with the R542 to link with Chrissiesmeer.

The Breyten-Kwazanele node is seen as a Rural Intervention area, and is located between Bethal, Ermelo and Carolina. This area is characterised by a number of Land Reform initiatives. In addition it must be noted that the Msukaligwa SDF designates the area between Ermelo and Breyten for urban peripheral uses. These uses include rural residential and agricultural holdings, mining and related uses, low intensity service industries and transport-related concerns, intensive agriculture and beneficiation of agricultural produce (Msukaligwa SDF, 2019).

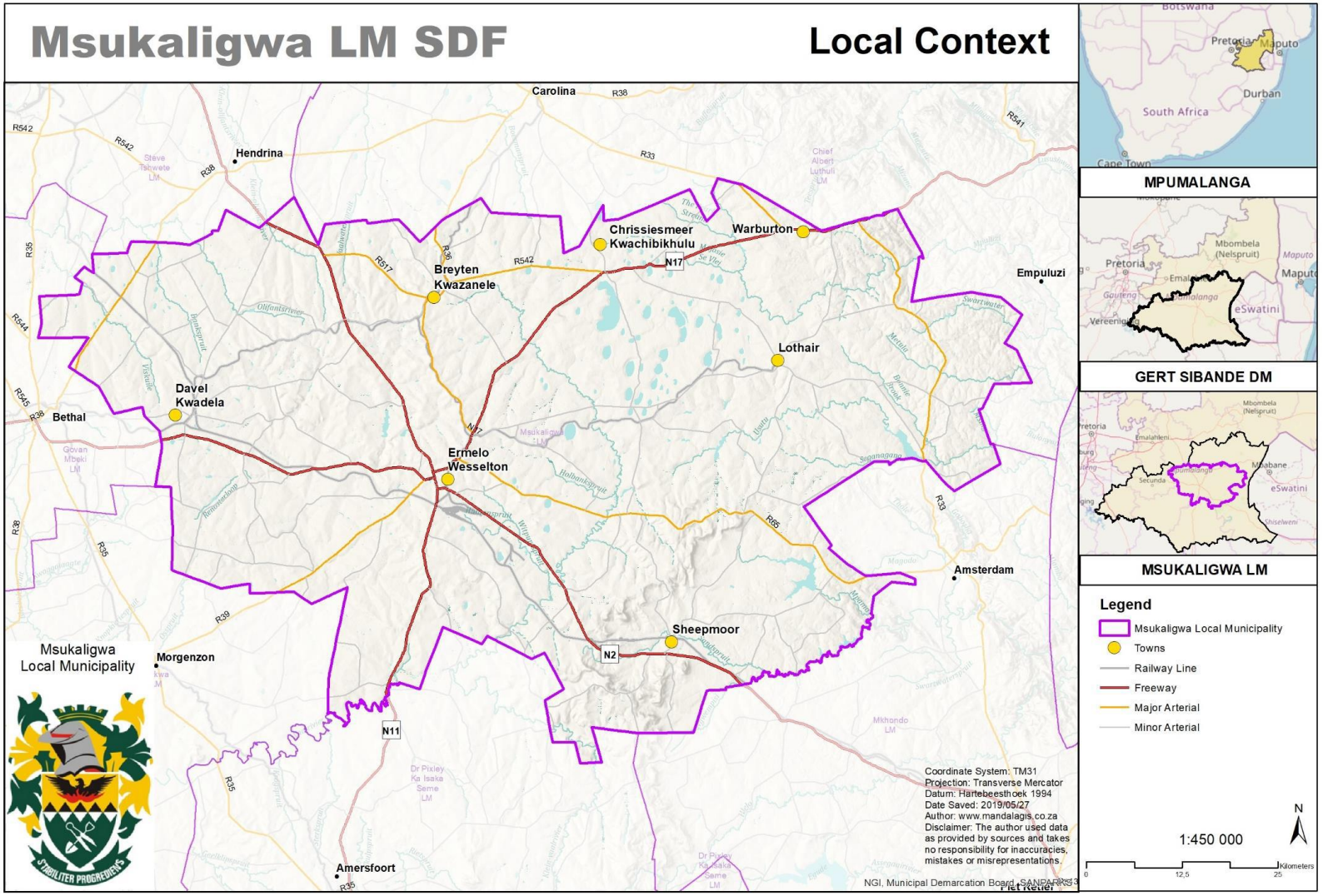


Figure 3: Msukaligwa Local Municipality

5.1.4 The local study area

The proposed mining development is situated in the northern section of the MLM area in Ward 14. The following figure indicates the location and extent of the MLM and the location of Ward 14 (www.wazimap.co.za)

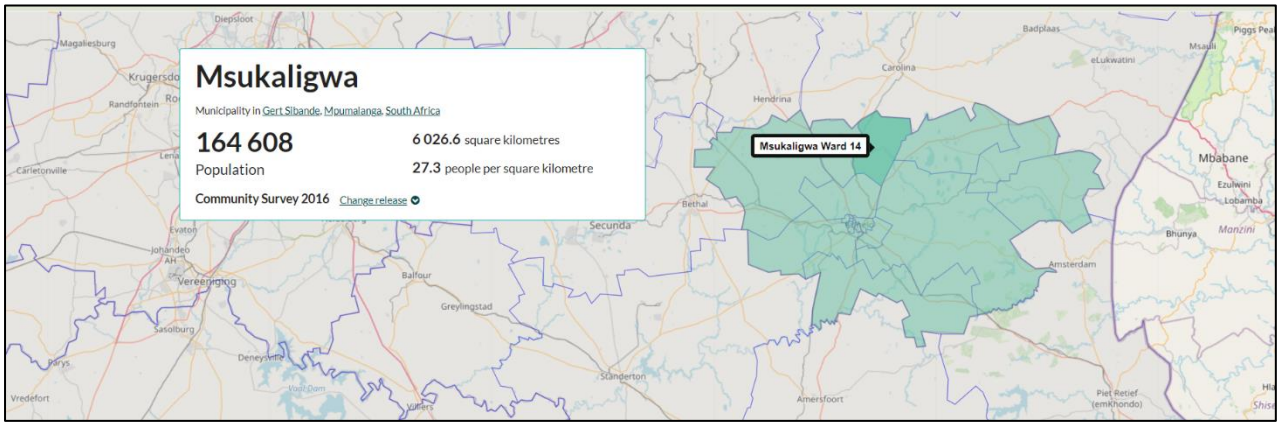


Figure 4: Msukaligwa Local Municipality and Ward 14

The directly affected properties are outlined as part of Figure 5: Surface owners.

Figure 5: Surface owners

The area surrounding Ermelo is characterised by agriculture and related activities, mining, utilities and power generation, transport, business and commercial activities. Various wetlands occur in the Chrissiesmeer area near Ermelo. These wetlands represent a high value ecological infrastructure for securing water for human use (Mpumalanga SDF, 2019).

Land-uses in the area adjacent the proposed mining area are mainly agricultural, with the wetlands area to the north of the study area towards Chrissiesmeer. The Chrissiesmeer Protected

Environment was declared one of the four strategic water sources in the province. It is highly likely that the landowners in the area are conscious of the environmental value of these wetlands.

5.2 Social Profile

5.2.1 Population Figures

The population figures in the study area are as follows:

Table 6: Population figures within the study area

POPULATION FIGURES WITHIN STUDY AREA			
Municipal area / Ward	**Population**	**Number of Households**	**% Under 18 Years Age Group**
GSDM	1 135 409	333 811	37%
MLM	164 608	51 090	35%
Ward 14 (2011 statistics)	6 090	1 640	38%

(Source: Mpumlanga SDF, 2019; Wazimap; Community Survey 2016; StatsSA Census 2011)

The MLM has a relatively small population, with a fairly high growth rate of 2.2%. The total population increased from 149 377 in 2011 to 164 608 in 2016. In 2016, just more than 14% of people in the GSD resided in the MLM. The average household size decreased from 3.6 to 3.2 from 2011 to 2016 (MLM SDF, 2019 & MLM IDP, 2020)

From the above it is clear that approximately a third of the population falls in the under 18 years age group. This indicates a definite need for future employment creation, education facilities and housing infrastructure.

5.2.2 Population Age

The following table provides an outline of the population per age category.

Table 7: Age Groups

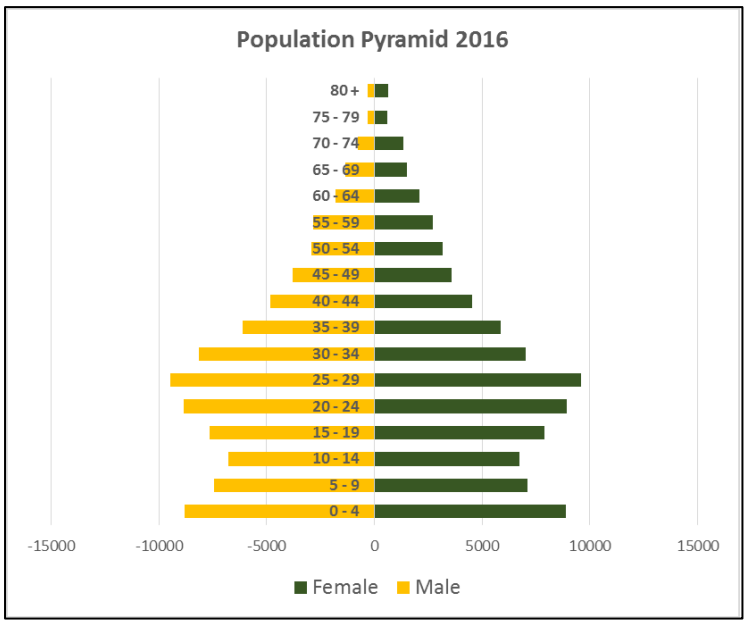
AGE GROUP						
Age category	**MLM: WARD 14 (83002014)**		**GSDM**		**MPUMALANGA**	
	% In Age Category	**Total**	**% In Age Category**	**Total**	**% In Age Category**	**Total**
0-9	23.3%	1,353	22.7%	226,445	22.4%	864,331
10-19	20.9%	1,215	21.2%	211,506	21.3%	820,626
20-29	18.3%	1,060	18.7%	186,174	19%	733,862
30-39	12.9%	750	12.5%	125,061	13%	499,874
40-49	10.2%	592	10.8%	107,503	10.6%	410,678
50-59	6.2%	362	7.2%	72,064	6.7%	258,444
60-69	3.9%	225	3.8%	38,084	3.8%	144,830

70-79	3%	175	2.1%	20,762	2.2%	82,978
80+	1.3%	74	1%	9,517	1.1%	42,520

(Source: StatsSA Census 2011)

The above table indicates that the age categories found in Ward 14 correlates with the trends of the province and district.

The population pyramid show that the MLM has a fairly young population, with the youth population (15-34 years) forming 41.2% of the total population. Approximately half of the population (51.1%) was female in 2016.



(Source: MLM SDF, 2019)

5.3 Population group

Table 8: Population Group

POPULATION GROUP						
GROUP	**MLM: WARD 14 (83002014)**		**GSDM**		**MPUMALANGA**	
	% In Age Category	**Total**	**% In Age Category**	**Total**	**% In Age Category**	**Total**
Black African	99.2%	6,042	88.6%	923,976	90.7%	3,662,219
Coloured	0.2%	10	1%	10,767	0.9%	36,611
Indian or Asian	0.3%	15	1.1%	11,002	0.7%	27,917
Other	0.1%	7	0.3%	3,171	0.2%	9,597
Unspecified	0%	0	0%	0	0%	0
White	0.3%	16	9%	94,279	7.5%	303,595

(Source: StatsSA: Census 2011)

5.3.1 Population Stability

The population of the MLM grew with 15 231 persons during the period from 2011 to 2016 with an annual average growth of 2.2%. Noticeably is the decrease in the White and Asian population category over the past five years, although no change with regards to the Coloured community were noted. A possible explanation to the decline in the White population could be a result of internal migration where other municipalities become recipients of in-migrants. Despite the negative net migration of the White population, the overall population of the municipality has continued on an upward trajectory (MLM IDP, 2021).

Formal settlements in the MLM, especially Ermelo/Wesselton, are experiencing in-migration, putting pressure on the provision of housing and services.

5.3.2 Education and Skills Levels

Similar education levels with regards to no schooling and those that have completed secondary school are found within the affected ward, municipal area and district. The workforce in the affected ward however, has an overall low level of education and skills with limited higher education levels. Individuals would thus find it difficult to enter the job market.

Table 9: Population by highest educational level

EDUCATION LEVELS WITHIN STUDY AREA			
Municipal area / Ward	**No Schooling**	**Completed Secondary**	**Higher Education**
GSDM	11%	34%	6%
MLM	11%	34%	7%
Ward 14 (2011 statistics)	10.6%	35.6%	1.6%

(Source: StatsSA: Census 2011)

Taking into consideration the way in which the municipality is growing and the shortage of skills within communities, there is a need for at least a tertiary institution within the district. With the development of Ermelo extension 32, 33 and 34 with a total of ± 2134 housing units, and the neighbouring New Ermelo settlement with ± 1650 housing units, there is a need for a high school in that area (MLM IDP, 2020).

Below is an outline of the number of educational facilities in the MLM.

Table 10: Educational Facilities

EDUCATIONAL FACILITIES IN THE MLM	
Day Care Centres	40
Primary Schools	71
Secondary/High Schools	17
Combined Schools	12
Private Schools	3
FET Colleges	1
ABET Centres	9

(Source: MLM SDF, 2019)

5.4 Employment and Income

Although various mines operate in the area between Breyten and Ermelo, these mines cannot accommodate all the jobseekers. Relative few other types of employment opportunities remain in the municipal area.

The official unemployment rate for the MLM, according to the Census 2011 statistics, amounts to 16%, with 36% not being economically active and 5% classified as discouraged work seekers. Ward 14 in the MLM has a higher unemployment profile.

According to newer information, the unemployment rate in the MLM deteriorated slightly from 23.1% in 2014 to 24.1% in 2017. Unemployment rates were also higher for females at 29.8% than for males at 24.1%. Of specific concern are the high youth unemployment rate of 34.5% (MLM SDF, 2019).

Poverty in MLM increased slightly, as measured by the share of the population living below the poverty line, i.e. 42.9% of the total population. This is a very high percentage, and represents a total number of people of 68 491 in 2017. The number of indigent households in MLM was 10 891 (MLM SDF, 2019).

The table below provides an indication of the employment status of those that would be in close proximity to the proposed mine (Ward 14). These figures, however, were still based on the 2011 statistics, and taking the overall rise in unemployment into account, as well as the impact of Covid-19, these figures below can even be much higher. This just emphasises the critical need for employment opportunities in the area, although focused on lower level skills.

Table 11: Employment status Ward 14

EMPLOYMENT STATUS IN WARD 14		
	MLM Ward 14	
STATUS	Percentage of workforce	No. of Individuals
Discouraged work-seeker	8.5%	321
Employed	29.1%	1,100
Other not economically active	35.6%	1,346
Unemployed	26.9%	1,016
Unspecified	0%	0

(Source: StatsSA: Census 2011)

Table 12 indicates that those in Ward 14 that are employed, are functioning in the formal employment system, followed by those in private households, with a small percentage of the workers in the informal sector.

Table 12: Sector of employment

SECTORS OF EMPLOYMENT IN WARD 14		
STATUS	MLM WARD 14 (83002014)	
	Percentage of workforce	No. of Individuals
Do not know	0.4%	4
In the formal sector	71.1%	793
In the informal sector	8%	89
Private household	20.6%	230
Unspecified	0%	0

(Source: StatsSA: Census 2011)

5.5 Safety, Security and Health

There are two police stations in the Ermelo/Wesselton area, and one in Breyten/KwaZanele and one in the Chrissiesmeer/Kwachibikhulu area (MLM SDF, 2019).

The proposed project site falls under the Breyton Police Precinct. The 2022 annual statistics indicate that there have been 412 crimes in total for the first six months. This is a decrease from criminal incidents reported from December 2021 to March 2022.

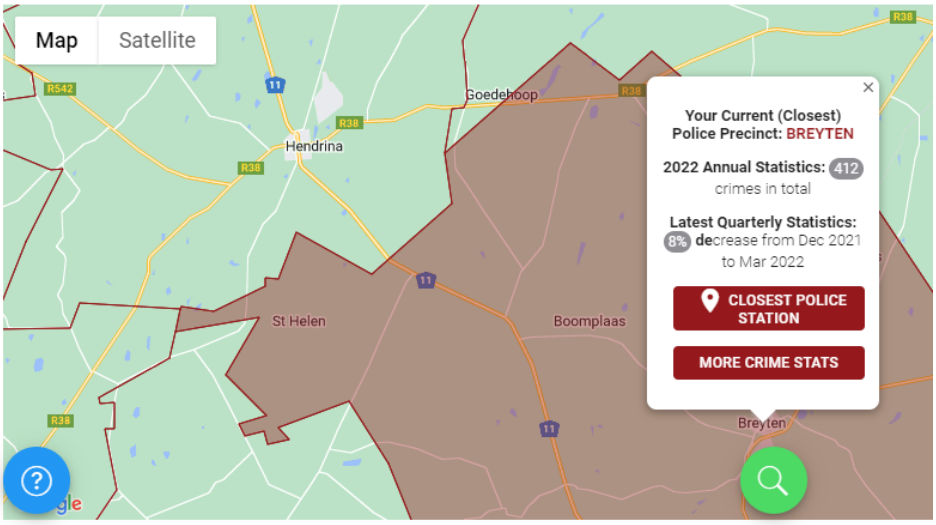


Figure 6: Police Precinct

(Source: Crime Stats SA)

In terms of safety and security, a Community Safety Forum has been established between the South African Police Service (SAPS), South African Defence Force, Taxi Associations, Transport industry and the community (MLM SDF, 2019).

Health care facilities in the MLM are:

Table 13: Health Care Facilities

HEALTH CARE FACILITIES IN THE MLM	
Facility	**Number**
Private Hospital	1
Primary Health Care Clinics	10
Mobile Clinics	4
Government Hospitals	1
Infectious Hospital (TB)	1
Dentist	4
Gynaecologists	1
Social workers	12
Private Doctors	20

(Source: MLM SDF, 2019)

5.6 Housing and Related Infrastructure

Human settlements are scattered throughout the MLM area resulting in some areas still lacking services and infrastructure. Close to 60% of the total population in MLM lives in the main node of Ermelo/Wesselton, followed by 10% in Breyten/KwaZanele. Around 16% of the population lives across the rural wards. It is estimated that due to urban migration that the population living in Ermelo/Wesselton will increase by 67% of the total population in 2050 (MLM SDF, 2019).

The migration into urban areas give rise to the fact that the municipality is facing a challenge of getting rid of the growing informal settlements.

The MLM has made some progress with regards to the provision of housing, but due to the influx of outsiders to the area, and the estimated continuous increase in-migration, the need will probably remain higher than the actual approved allocations. The low cost housing demand is currently estimated at 20,000 units. Further concerns in the area also relate to the provision of water, sanitation and electricity (MLM SDF, 2019).

The MLM is continuously aiming to address the issues of basic service delivery and the provision of housing, but significant issues still need to be addressed.

The following table indicates that the majority of households in Ward 14 are residing in formal structures.

Table 14: Households by type of dwelling Ward 14

HOUSEHOLDS IN WARD 14		
TYPE OF HOUSEHOLD	MLM WARD 14 (83002014)	
	Percentage	No. of Households
House	84.4%	1,385
Shack	9%	147
Traditional	5.7%	94
Flat in backyard	0.5%	8
Other	0.4%	7

(Source: StatsSA Census 2011)

The state of most of the municipal roads especially the gravel roads are bad with poor storm water drainage. This situation is exacerbated by heavy trucks transporting coal that are causing a lot of damage to roads.

5.7 Basic Service Delivery

Linked to service delivery, the Msukaligwa IDP (2019) indicated that the MLM is currently experiencing a backlog of 1.5% of households without hygienic toilets, 11.1% without electricity and 6.7% without piped water. Further challenges include lack of safe and reliable water supply, inadequate roads and ageing services infrastructure.

The municipality offers free basic water of six kilolitres (6kl) to indigent households only. The provision of free basic electricity remains a challenge to the municipality. Eradication of informal settlements is one of key challenges of the municipality as these impact on community health due to poor sanitation services, refuse removal and inaccessibility to some sections of the settlement as result of poor/none existence of roads (Msukaligwa IDP, 2021).

The tables below provide an overview of service delivery statistics for ward 14. The majority of residents receive their water from formal supply, but some are still reliant on e.g. the river and other sources. The 94.5% of the households that are getting water from a regional or local service provider, is about 25 percent higher than the rate in GSDM and 1.3 times the rate in Mpumalanga.

Table 15: Population by water source

SOURCES OF WATER IN WARD 14		
TYPE OF WATER SOURCE	MLM WARD 14 (83002014)	
	Percentage	No. of Households
Service provider	94.5%	5,750
River	1.4%	86
Tanker	1.3%	77
Rainwater tank	1.2%	73
Other	1.7%	101

(Source: StatsSA Census 2011)

5.7.1 Water and Sanitation

The towns and rural settlements in MLM are served by formal water reticulation networks. Just over 93% of households have adequate water supply, with a low backlog of 6.7% remaining. This is an improvement from a backlog of 9.4% in 2001 and 8.3% in 2011.

It is also noted in the IDP that the backlog affects mainly rural communities, where water provision is achieved via boreholes. Such communities do have access to water, but not at RDP standards. Challenges in providing boreholes for water include large distances and resistance from private land owners (MLM SDF, 2019 & MLM IDP, 2020).

Challenges in providing water borne sanitation systems persist in rural areas, due to vast distances and low population density. Water scarcity may also become an increasing challenge in future in view of climate change and alternative systems may have to be considered. In addition, it was noted that the water treatment works were all operating over the design capacity (MLM IDP, 2020).

The table below provides an overview of the sanitation services available in Ward 14.

Table 16: Sanitation facilities Ward 14

SANITATION FACILITIES IN WARD 14		
	MLM WARD 14 (83002014)	
TYPE OF WATER SOURCE	Percentage	No. of Households
Flush toilet	92.3%	1,514
Other	2.6%	43
Pit latrine without ventilation	2.3%	37
None	1.7%	28

(Source: StatsSA Census 2011)

The table indicates the following:

- 93% of households have access to flush or chemical toilets which is about 1.4 times the rate in GSDM (67.08%) and about double the rate in Mpumalanga (45.47%); and
- 1.7% of households have no access to any toilets which is about one-third of the rate in GSDM (4.99%) and about one-quarter of the rate in Mpumalanga (6.27%).

5.7.2 Electricity

Both the municipality and Eskom supply electricity to various parts of MLM. The municipality supplies mostly the towns / nodes, and Eskom mostly the extensive rural areas. Eskom's coal-based Camden Power Station is located south of Ermelo, supplying electricity into the national grid (MLM SDF, 2019).

Areas that are currently not electrified and where backlogs exist are the various informal settlements. The Municipality admits that there is a backlog within MLM's jurisdiction but under Eskom's license areas. The major challenges in these areas affecting farm dwellers are secluded off-grid areas and that of wayleave issues whereby landowners refuse to sign (MLM IDP, 2021).

5.7.3 Waste Management

Waste management is the most challenging in term of basic service provision in MLM, with a remaining refuse removal backlog of 35%.

The municipality only collects domestic waste, building rubble and garden waste. It is the mandate of industries generating hazardous and industrial waste to dispose these types of waste to registered landfills licensed to dispose hazardous waste. There are two waste disposal sites and three waste transfer stations in MLM.

Mining waste should be managed in terms of the conditions of each mine's mining licences (MLM IDP, 2020)

Table 17: Refuse Removal

REFUSE REMOVAL IN WARD 14		
	MLM WARD 14 (83002014)	
TYPE OF WATER SOURCE	Percentage	No. of Households
Service provider (regularly)	63.9%	3,893
Own dump	25.4%	1,545
Communal dump	8.2%	499
None	2.2%	131
Other	0.3%	21

(Source: StatsSA Census 2011)

5.8 Local Economic Profile

Mpumalanga has five urban centres, namely Mbombela, Secunda, Emalahleni, Ermelo and Middleburg that can be considered as the regional economic engines. Almost 70% of the provinces Gross Value Added (GVA) is generated in or around these towns. The Spatial Development Strategy thus intends to capitalise these towns' economic bases for provincial economic development (Mpumalanga SDF, 2019).

With regards to economic development, the following two key focus areas of the GSDM were identified:

- integrate economic activities to provide local employment and job creation; and
- facilitate economic growth and development in the manufacturing, mining, agriculture and tourism sectors.

It is further proposed to integrate the small towns and deteriorating mining towns with the economic growth centres and tourism nodes by means of physical and economic infrastructure. Town specific urban regeneration strategies must further be developed. These strategies may include proposals linked to the diversification of town economies, mining heritage tourism, SMME development and human capacity building, as well as rehabilitation of the natural environment and mining landscape (Mpumalanga SDF, 2019).

It however, remains important to promote diversification of economic activities by identifying the economic potentials and providing incentives for investment.

The economic growth rate for The MLM was at 3.0% per annum on average, over the period 1996 to 2017. The forecasted average annual Gross Domestic Product (GDP) growth for 2017-2022 was relatively low at 1.3%. The contribution of the MLM to the Mpumalanga economy was around 4.3%, making it the fifth largest local economy in the province. It is the second largest economy in the district, contributing around 15.5% (MLM SDF, 2019).

The main economic sectors in the MLM are agriculture, transport and mining as well as some timber processing. The finance and agriculture sectors achieved the highest (albeit slim) growth in contribution from 2014 to 2017, and the contribution of the utilities, mining and trade sectors declined slightly (MLM SDF, 2019).

In terms of future economic development in MLM, coal mining can be expected to remain an important sector for the short to medium term. This sector, however, can possibly decline in the medium to long term due to limited coal resources, and a move away from a coal-based economy locally and globally in view of climate change mitigation. Alternative development sectors will have to be explored, to ensure a more diversified sustainable local economy. Threats to economic growth such as inadequate infrastructure, skills shortage and distance from markets will however have to be dealt considered (MLM SDF, 2019).

If the average annual growth of the local economy is lower than the population growth rate, poverty levels will deepen if not adequately addressed.

6. ANTICIPATED SOCIAL IMPACTS ASSOCIATED WITH THE PROPOSED PROJECT

The following table outlines the potential impacts and possible risks associated with the proposed project. These impacts and risks are based on existing baseline information. There is thus always an uncertainty with regards to the anticipated impact actually occurring, as well as the intensity thereof. Impact predictions have been made as accurately as possible based on the information available at the time of the study. Further studies would be required as part of the detailed phase of the project.

Table 18: Anticipated socio-economic impacts and risks

Baseline theme	Change Process and Expected Impacts	Impact Category				Status	Mitigation and Management	
		Construction	Operations	Closure	Post closure		Management Objective	Mitigation Effect
Demographic:	Influx of people and households related to those formally employed by the mine: demands on housing and social services	X	X			Negative/ Positive	Minimise any possible negative impacts through information sharing processes. Maximise the employment of locals Enhance the local spending patterns	Can be managed or mitigated to some extent
	Potential informal influx of people in the form of job seekers are anticipated: possible tension between groups and demonstrations	X	X			Negative	Minimise any possible negative impacts related to informal population influx as a direct result of the proposed project in coordination with local authorities e.g. through information sharing processes.	Can be managed or mitigated to some extent
	Change in the social fabric of the community as a result of the proposed project: growth in town, tension between different social groups	X	X			Negative / Positive	Minimise any possible negative impacts through information sharing processes. Maximise the employment of locals	Can be managed or mitigated to some extent
Nuisance factors:	Increase in nuisance factors (noise and dust)	X	X	X		Negative	Limit negative impacts of nuisance factors (intrusions, noise and dust). Pollution prevention of construction site and mining area.	Can be managed or mitigated

Baseline theme	Change Process and Expected Impacts	Impact Category				Status	Mitigation and Management	
		Construction	Operations	Closure	Post closure		Management Objective	Mitigation Effect
	Blasting	X	X			Negative	Limit negative impacts of blasting Pro-active communication regarding blasting schedules	Can be managed or mitigated
Safety and security:	Unfulfilled community expectations in terms of the employment creation and community development funds could increase the potential for civil unrest in the area	X	X			Negative	Avoid creation of unrealistic expectations; Implement transparent communication processes Maximise the employment of locals	Can be avoided, managed or mitigated
	Community safety due to mining and infrastructure development	X	X		X	Negative	Limit safety and health risks through design considerations, location of infrastructure and precautionary construction and operational management principles.	Can be managed or mitigated
	Possible increase in crime due to influx of people	X	X			Negative	Maximise the employment of locals	Can be managed or mitigated to some degree
	Traffic accident risks due to mining related traffic flow	X	X			Negative	Limit safety risks during transportation of personnel and material	Can be managed or mitigated
Public infrastructure and services:	Additional pressure on existing health facilities and infrastructure (e.g. clinics, housing, water, electricity, roads) due to population increase associated with employees and their families, as well as jobseekers.	X	X			Negative	Involve locals in employment opportunities and procurement	Can be managed or mitigated to some degree
Local income and employment:	Positive impacts on local employment and income due to the operation itself and due to supply-links with local suppliers.	X	X			Positive	Involve locals in employment opportunities and procurement	Can be managed or enhanced

Baseline theme	Change Process and Expected Impacts	Impact Category				Status	Mitigation and Management	
		Construction	Operations	Closure	Post closure		Management Objective	Mitigation Effect
	A decrease/cessation in employment and community funds could negatively impact former beneficiaries			X	X	Negative	Closure Plan to attend to this way in advance	Can be managed or mitigated
	Possible social dissatisfaction with regards to allocation of job opportunities and local procurement associated with the mining activities	X	X			Negative	Source and maximise local skills and local procurement if and where possible	Can be managed or mitigated
	Unfulfilled community expectations in terms of employment creation could result in social conflict	X	X			Negative	Avoid creation of unrealistic expectations; Implement transparent communication processes Maximise the employment of locals	Can be avoided, managed or mitigated
Social funds:	Increased tax income: Due to positive spin-offs on employment and income levels, it is expected that tax revenue to local, provincial and central government will occur	X	X			Positive	Mining activities and employment creation	Can be managed or enhanced
	Social funds for socio-economic development.		X			Positive	Mining activities and distribution of social funds	Can be managed or enhanced
External costs:	Potential negative environmental or social impacts (external costs related to project): This could include negative impacts on land-use, groundwater, air quality, biodiversity, traffic, road infrastructure, health and community safety.	X	X	X	X	Negative	Environmental management of site can limit possible negative impacts	Can be avoided, managed or mitigated
Poverty:	Employment and possible job creation for low-income groups throughout life of mine	X	X			Positive	Avoid creation of unrealistic expectations; Implement transparent communication processes	Can be managed or enhanced

Baseline theme	Change Process and Expected Impacts	Impact Category				Status	Mitigation and Management	
		Construction	Operations	Closure	Post closure		Management Objective	Mitigation Effect
							Maximise the employment of locals	
Economic:	The project can contribute to economic activities in the local economy but if closure occurs the positive inputs on local economy will cease.	X	X	X	X	Positive/ Negative	Involve locals in employment opportunities and procurement	Can be managed or enhanced
	Loss of income due to loss of resource use	X	X	X	X	Negative	Implement transparent communication processes Loss of resource use cannot be mitigated	Cannot be mitigated
Land-use and impact on sense of place:	Mining activities will have a negative impact on the current land-use and subsequent impacts on the sense of place	X	X			Negative	Environmental management of site can limit possible negative environmental and visual impacts Land-use impacts are difficult to manage or to mitigate	Difficult to manage and mitigate
	Possible negative impact on the tourism node of Chrissiesmeer/Kwachibikhulu	X	X	X		Negative	Environmental management of site can limit possible negative environmental and visual impacts Land-use and visual impacts are difficult to manage or to mitigate	Difficult to manage and mitigate
	Attitude formation against and opposition to the project	X	X			Negative	Implement transparent communication processes	Difficult to manage and mitigate
Impact on Resource Use:	Loss of agricultural resource use due to mining activities	X	X			Negative	Implement transparent communication processes Loss of resource use cannot be mitigated	Cannot be mitigated

Baseline theme	Change Process and Expected Impacts	Impact Category				Status	Mitigation and Management	
		Construction	Operations	Closure	Post closure		Management Objective	Mitigation Effect
	The energy and water use needs to be considered.		X			Negative	Environmental management of site can limit possible negative impacts	Can be managed or mitigated

7. DESKTOP VERIFICATION OUTCOME

Based on the outcome of the baseline assessment, social screening and site verification, as discussed under Section 6: Table 18: Anticipated socio-economic impacts and risks, it was concluded that various socio-economic impacts can occur as a result of the proposed mining activities.

Considering the site sensitivity verification of the site, the dominant agricultural land-use within the project area was identified as having a very high sensitivity from a socio-economic perspective. Loss of the resource use can occur which will result in high negative socio-economic consequences.

Table 19: Desktop Verification Outcome

SOCIO-ECONOMIC THEME	SCREENING TOOL SENSITIVITY	VERIFIED SENSITIVITY	OUTCOME STATEMENT/PLAN OF STUDY	RELEVANT SECTION MOTIVATING VERIFICATION
Demographic	None provided	**Moderate**	Social Impact Assessment	Section 7 and 9
Nuisance factors	None provided	**Moderate**	Social Impact Assessment	Section 7 and 9
Safety and security	None provided	**Moderate**	Social Impact Assessment	Section 7 and 9
Public Infrastructure and Services	None provided	**Moderate**	Social Impact Assessment	Section 7 and 9
Local employment and income	None provided	**High (+)**	Social Impact Assessment	Section 7 and 9
Social Funds	None provided	**Moderate (+)**	Social Impact Assessment	Section 7 and 9
External costs	None provided	**Moderate**	Social Impact Assessment	Section 7 and 9
Poverty	None provided	**Moderate (+)**	Social Impact Assessment	Section 7 and 9
Economics	None provided	**Moderate (+)**	Social Impact Assessment	Section 7 and 9
Land-use and impact on sense of place	None provided	**High**	Social Impact Assessment	Section 7 and 9
Impact on Resource Use	None provided	**High**	Social Impact Assessment	Section 7 and 9

8. REASONED OPINION REGARDING THE ACCEPTABILITY OF THE PROPOSED PROJECT

Based on the outcome of the baseline assessment, social screening and site verification, as discussed under Section 7: Table 16: Anticipated socio-economic impacts and risks, it was concluded that various socio-economic impacts can occur as a result of the proposed mining activities.

Based on the information included in Section 7 and the interim conclusions, it is recommended that a detailed SIA be undertaken during the next phase of the Environmental Authorisation process.

8.1 Negative Impacts

The socio-economic impacts on the existing landowners will be high (negative), due to the loss in the land- and resource use. This will be difficult to mitigate.

Negative impacts of a more moderate significance refer to demographic changes, nuisance factors, safety and security issues, increased pressure on public infrastructure and services, external costs (e.g. negative impacts on land-use, groundwater, air quality, biodiversity, traffic, road infrastructure, health and community safety) associated with mining, as well as the impact on the sense of place. At this stage, it is concluded that these impacts can be managed and mitigated to some extent.

8.2 Positive Impacts

Positive impacts refer to employment and income due to the operation itself and due to supply-links with local suppliers, as well as possible job creation for low-income groups throughout the life of mine, availability of social funds for socio-economic development and subsequent positive impact on poverty levels. The positive impacts can be enhanced.

8.3 Attitude Formation

Although attitude formation is not an impact per se, it serves an important indication of community sentiments toward the project. Attitudes can be defined as lasting, general evaluations of people. Attitudes can be formed through the individual's own experience and/or reports in the media. It could provide important information regarding the feelings and potential actions of Interested and Affected Parties (I&APs) that could become evident during the appeal period of the Environmental Impact Assessment process, and/or during the construction and operational phases of the proposed project.

No formal engagements or meetings with stakeholders have been conducted to date. It is anticipated that different responses and opinions regarding the project will be submitted throughout the process. It is highly likely that local unemployed community members in the study area will have a positive attitude towards the project due to the high unemployment figures in the affected ward and in the local municipal area that emphasises the need for employment creation (Also refer to the discussion under Section 5.4 with regards to employment and income). Other initial responses to the project by the some of the adjacent landowners in the study area indicate that there are some form of attitude formation. These relate to possible negative impacts on the land- and resource use, intrusions on the rural character of the area and possible devaluation of the property values, together with concerns regarding the possible negative environmental impacts.

Initial issues and opinions already raised should thus be noted. These should further be considered in terms of future community involvement and stakeholder engagement as part of the public participation process to be undertaken and during the detailed impact assessment phase..

9. PLAN OF STUDY FOR DETAILED EIA PHASE

9.1 Further Literature Review

Relevant additional literature would be reviewed and incorporated into the report. The review would thus assist the consultants to obtain further demographic and socio-economic information about the receiving environment and to build on the initial profiling of the local population's socio-economic characteristics.

9.2 Consultation Sessions and Fieldwork

During the EIA phase, more primary data would also be gathered through consultation with the stakeholders and affected parties, and linkages with the public participation process.

9.3 Variables to be assessed

The following variables are typically assessed as part of the SIA:

- Population impacts.
- Community/institutional arrangements.
- Conflicts between local residents and newcomers.
- Individual and Family level impacts.
- Community infrastructure needs.
- Intrusion impacts.

For the purpose of assessing the impacts associated with the proposed project, the above variables will be adapted to allow for the assessment undertaken during the EIA phase. These variables would relate to the construction and operational phases of the proposed project.

9.4 Analysis of data compiled from parallel studies

If available, the SIA team will study and analyse the information gathered by the biophysical studies. This information would include technical, environmental, economic and demographic aspects, land-use changes, impact on other facilities, services, and so forth. The SIA will be done in parallel with the public participation process. This would help the social team to assess the impact of the proposed development on the direct (surrounding communities) and indirect (regional) environment.

9.5 Additional Data

Additional data as indicated in the main section of the document would be sourced and assessed.

9.6 Significance Criteria

As part of the SIA Process, the anticipated social impacts would be rated according to a rating framework specified by the environmental consultants. The impact assessment methodology makes provision for the assessment of impacts against the following criteria:

- Significance;

- Spatial scale;
- Temporal scale (duration);
- Probability; and
- Degree of certainty.

9.7 Reporting

The SIA Report will be compiled and generally includes the following:

- A background description of the social environment including demographic and socio-economic characteristics, land-use profile and infrastructure requirements.
- A background description of the local economy.
- Linkages with the integrated development planning processes in the area.
- An assessment of the anticipated social impacts – negative and positive (including core aspects needing attention).
- Rating of impacts.
- Formulation of specific mitigating and management strategies to minimise negative social impacts and increase positive impacts of the proposed development.
- Conclusions and recommendations (also for further studies, if necessary); and
- A Social Management Plan

The mitigation and management measures proposed would culminate in the development of a Social Management Plan (SMP). The aim of the SMP is to provide a plan for the implementation of mitigation and future monitoring and management measures with regards to the possible impacts on the socio-economic environment. This would enable all those responsible for implementation (e.g. the project developer/applicant, communities, government institutions and so forth) to implement their relevant management action plans and processes, as well as establish communication channels to successfully and jointly deal with the project impacts and risks, and to maintain an ongoing role in monitoring these.

10. CONCLUSION AND RECOMMENDATIONS

The report has provided an overview of the proposed project and the socio-economic baseline of the project area. Anticipated positive and negative impacts have been identified. The ratings and significance thereof will be determined during the impact assessment stage (Phase 2).

Based on the desktop study and the site visit undertaken in July 2022, the proposed BCR Vlakfontein mine will pose social impacts and risks. It is the specialists' recommendation that a detailed SIA be undertaken to determine the significance of the impacts and to provide appropriate mitigation and management measures to limit the negative impacts and to enhance the positive impacts.

In addition, obtaining landowner consent as per the EIA Regulations will need to be undertaken with the relevant landowners. At this stage attitude formation against the project has been noted which could impact on the execution of the assessment and the overall EIA process. It is therefore further anticipated that obtaining landowner consent could be a complicated process that would require further discussions and negotiations.

11. SOURCES CONSULTED

11.1 Documents

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11.2 Websites

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www.demarcation.org.za

www.gsibande.gov.za

www.municipalities.co.za

www.msukaligwa.gov.za

www.wazimap.co.za

12. ANNEXURE A

12.1 CURRICULUM VITAE OF SPECIALISTS

CURRICULUM VITAE: INGRID SNYMAN

Name:	**Ingrid Helene Snyman**		
Profession:	Social Development Consultant	**Name of firm:**	Batho Earth
Years of Experience:	20 + years		

KEY QUALIFICATIONS

- Social Impact Assessment (SIA)
- Public Participation programmes
- Communication, development of community structures and community facilitation
- Community-based training and
- Workshop reports

EDUCATION

1992:	B A (Political Science) University of Pretoria
1995:	B A (Hons) Anthropology University of Pretoria
1996 - 1997:	Train the Trainers Centre for Development Administration – UNISA

EXPERIENCE RECORD

2000 to date	Independent Development Consultant: Batho Earth
1996 to 2000	Social Consultant: Afrosearch (Pty) Ltd.

PROJECT EXPERIENCE

Mining Industry

- Beeshoek Optimisation Project, near Postmasburg, Northern Cape
- Gloucester development, near Postmasburg, Northern Cape
- Blesboklaagte Colliery Section 102, Mpumalanga
- Kareerand Tailings Storage Facility (TSF) Expansion Project, Near Stilfontein, Northwest Province
- Khumani Mine, Mokaning Expansion, Kathu, Northern Cape Province
- Theta Hill Gold Mining Projects near Pilgrim's Rest, Mpumalanga
- Khulu TSF at Dwarsrivier Mine, near Steelpoort, Limpopo Province
- Social Risk Assessment for Dwarsrivier Chrome Mine, near Steelpoort, Limpopo Province
- Vandyksdrift Central (VDDC) Mining: Infrastructure Development, Mpumalanga
- PPP for the development of various additional listed activities at the Dwarsrivier Chrome Mine, near Steelpoort, Limpopo Province
- Project 10161 and Project 10167 (Gold Mining) by Stonewall (Pty) Ltd., near Sabie and Pilgrims Rest, Mpumalanga
- Manganese Mine Northwest of Hotazel, Northern Cape (Mukulu Environmental Authorisation Project)
- South32 SA Coal Holdings Middelburg Colliery Environmental Management Plan (EMP) and Water Use Licence (WUL) Application Project (Life of Asset Open Cast Expansion and Dispatch Rider Project), Middelburg, Mpumalanga

- Manganese Mine on the Remaining Extent of the Farm Paling 434, Northern Cape Province: Revision and Amendment of Existing Approved Environmental Management Programme (EMP) For A Mining Right
- Western Bushveld Joint Venture Project (Maseve Platinum Mine), Northwest Province
- Basic Assessment for the extension of the Komati coal stockyard, Mpumalanga
- Dorstfontein Mine Western Expansion Project, Kriel, Mpumalanga
- Grootboom Platinum Mine, Steelpoort, Limpopo Province
- Dorstfontein Mine Expansion Project, Kriel, Mpumalanga

Mixed Use Land/Housing Developments

- Gauteng Rapid Land Release Programme: Four Sites: Hekpoort / Bryanston / Lenasia / Rietfontein (Ennerdale), Gauteng
- Wildealskloof Mixed Use Development near Bloemfontein, Free State (ongoing)
- Mixed Land Use Township Establishment on the Remainder of Portion 406 of the Farm Pretoria Town and Townlands 351 JR, and investigation with regards to the possible resettlement of households, Salvokop, Tshwane CBD
- Mixed Land Use Development situated on the Remainder of Allandale 10 IR, known as Rabie Ridge Ext 7, Midrand, Gauteng
- Basic Assessment for the proposed development of Project One (1) of the Vosloorus Extension 9 High Density Housing Project, Ekurhuleni Metropolitan Municipality
- Mapochsgronde Residential Development, Roossenekal, Limpop Province
- Cullinan Estate Development, Cullinan, Gauteng
- Vlakfontein Residential Development and investigation with regards to the possible resettlement of individual households, Brakpan, Gauteng
- Township development/eco-estate on the farm Grants Valley, Eastern Cape

Bulk Infrastructure and Supply

- Integrated Public Transport Network for the Mangaung Metropolitan Municipality (ongoing)
- Olifantsfontein Landfill, Gauteng
- K43 Road Construction near Lenasia, Gauteng
- Mangaung Bus Depot for the Integrated Public Transport Network (IPTN) in Bloemfontein, Free State
- Greenwich Landfill Site, Newcastle, KwaZulu Natal
- Mangaung Gariep Water Augmentation Project, Free State
- Tshwane Regional General Waste Disposal Facility (Multisand Landfill), Pretoria, Gauteng Province
- Basic Assessment for the proposed K97 Road northbound of the N4 at Bon Accord and investigation with regards to the possible resettlement of business premises, Pretoria, Gauteng
- Extension of the Wemmershoek Wastewater Treatment Works (WWTW), decommissioning of the Franschhoek WWTW and construction of a transfer and outfall sewer between the two works, Franschhoek, Western Cape
- Lefaragathle, Mogono, Rasimone, Chaneng outfall sewer and Chaneng sewer treatment plant, Rustenburg (Phokeng), North West Province
- Proposed upgrading of railway stations and railway line for Metrorail in Mamelodi, Gauteng
- ACSA Remote Aprons Project, O.R. Tambo International Airport, Gauteng
- Public Participation and SIA as part of the Environmental Scoping Study for the proposed upgrading of the Waterval Water Care Works

Ecosystem Services Review

- Proposed Ngonye Falls Hydro-Electric Power Plant Project, Western Province, Zambia: Biodiversity Assessment: Stakeholder Engagement Plan and Social Assessment for the Ecosystem Services Review (ESR)

Projects related to electricity generation, transmission and distribution

- Crowthorne-Lulamisa power line, Midrand, Gauteng
- Basic Assessment for the proposed Crowthorne Underground Cable, Gauteng
- Basic Assessment for the proposed Diepsloot East Servitude and substation, Gauteng
- Mitchells Plain-Firgrove-Stikland Transmission Line project and investigation with regards to the possible resettlement of individuals within Mitchells Plain, Western Cape
- 400 kV Transmission Power Line for approximately 10km to the west of the existing Marathon Substation and possible resettlement of homesteads, Nelspruit area, Mpumalanga
- Basic Assessment for the proposed construction of a 400 kV transmission line between the Ferrum substation (Kathu) and the Garona substation (Groblershoop), Northern Cape Province
- Basic Assessment for the proposed construction of the Eskom Rhombus-Lethabong 88kv Powerline and Substation, North West Province
- Aberdeen-Droerivier 400 kV Transmission Power Line, Eastern and Western Cape Province
- Houhoek Substation Upgrade and Bacchus-Palmiet Loop-In and Loop-Out, near Botrivier, Western Cape Province
- Arnot-Gumeni 400 kV Transmission Power Line, Mpumalanga
- Aggeneis-Oranjemond Transmission Line project, Northern Cape Province
- Ariadne-Venus Transmission Line, KwaZulu Natal
- Dominion Reefs Power Line project, North West Province
- Kyalami Strengthening Project, Kyalami, Gauteng
- Apollo Lepini 400 kV Transmission Line Project, Tembisa, Gauteng
- Public Participation for the proposed new Medupi (then referred to as Matimba B) coal-fired power station in the Lephalale area, Limpopo Province
- Public Participation and SIA for the proposed Poseidon-Grassridge No. 3 400 kV Transmission line and the extension of the Grassridge Substation, Eastern Cape Province
- Public Participation and SIA for the proposed construction of power lines between the Grassridge Substation (near Port Elizabeth) and the Coega Industrial Development Zone, Eastern Cape Province
- Public Participation and SIA for the Matimba-Witkop No. 2 400 kV Transmission line in the Limpopo Province

Photovoltaic and Wind Energy Facilities

- Christiana PV facility on the farm Hartebeestpan, North West Province
- Hertzogville PV facility on the farms Albert and Wigt, Free State Province
- Morgenzon PV facility on the farm Morgenzon, Northern Cape Province
- Basic Assessment Process for the Exxaro Photovoltaic Facility, Lephalale, Limpopo Province
- Upington Solar Energy Facility, Northern Cape Province
- Kleinbegin Solar Energy Facility, Northern Cape Province
- Ilanga solar thermal power plant facility on a site near Upington, Northern Cape Province
- Karoo Renewable Energy Facility, Northern Cape
- Wag'nbiekiespan Solar Energy Facility, Northern Cape Province
- Kathu and Sishen Solar Energy Facilities, Northern Cape Province
- Thupela Waterberg Photovoltaic Plant, Limpopo Province
- Kannikwa Vlakte Wind Farm Project, Northern Cape

Public Participation

- Beeshoek Optimisation Project, Northern Cape Province
- Mixed Land Use Development Referred to as Mogale Ext 42, 43 And 44, Muldersdrift, Mogale, Gauteng

Province

- Khumani Mine, Mokaning Expansion, Kathu, Northern Cape Province (ongoing)
- Theta Hill Gold Mining Project near Pilgrim's Rest, Mpumalanga
- Dwarsrivier Chrome Mine (Pty) Ltd.: Environmental Authorisation Application for various Listed Activities at the Dwarsrivier Chrome Mine, Near Steelpoort, Limpopo Province (ongoing)
- Proposed Project 10161 and Project 10167 (Gold Mining) by Stonewall (Pty) Ltd., near Sabie and Pilgrims Rest, Mpumalanga
- Public Participation for Sable Platinum for the proposed prospecting application on the farm Doornpoort, Pretoria, Gauteng
- Public Participation for the prospecting application on the farms Frischgewaagd and Kleinfontein, Mpumalanga Province for PTM
- Public Participation for the prospecting application on the farm Klipfontein, Gauteng for PTM
- Truck Stop Development, Buffelspoort, North West Province
- Medupi (then referred to as Matimba B) coal-fired power station in the Lephalale area, Limpopo Province
- Poseidon-Grassridge No. 3 400 kV Transmission line and the extension of the Grassridge Substation, Eastern Cape Province
- Construction of power lines between the Grassridge Substation (near Port Elizabeth) and the Coega Industrial Development Zone, Eastern Cape Province
- Matimba-Witkop No. 2 400 kV Transmission line in the Limpopo Province
- Upgrading of the Menlyn Road Network and the investigation, as well as negotiations with regards to the resettlement of households, Pretoria, Gauteng
- Public participation assistance for the Gautrain Project, Gauteng
- Platinum Highway Project from the N1 (Gauteng) to the Botswana Border (North West Province), including investigations with regards to the possible resettlement of individual households
- Brewery and associated industrial activities for Heineken Supply Co (Pty) Ltd, Kempton Park

12.2 DECLARATION OF INDEPENDENCE

In terms of the National Environmental Management Act (Act No. 107 of 1998) (NEMA), as amended in respect of the EIA Regulations of December 2014, and GNR 982 published on 4 December 2014, an independent consultant must be appointed to act on behalf of the client. In this regard Batho Earth submit that they have:

- The necessary required expertise to conduct a Social Impact Assessment, including the required knowledge and understanding of any guidelines or policies that are relevant to the proposed process;
- Undertaken all the work and associated studies in an objective and independent manner, even if the findings of these studies are not favourable to the project proponent;
- No vested financial interest in the proposed project or the outcome thereof, apart from remuneration for the work undertaken under the auspices of the above-mentioned regulations;
- No vested interest, including any conflicts of interest, in either the proposed project or the studies conducted in respect of the proposed project, other than complying with the required regulations; and
- Disclosed any material factors that may have the potential to influence the competent authority's decision and/or objectivity in terms of any reports, plans or documents related to the proposed project as required by the regulations.