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## **Pan African Resources PLC (PAR) Environmental Application Process**

### **Social Impact Assessment (SIA)**

**Prepared for:**

Pan African Resources PLC (PAR)

**Project Number:**

PAR7273

July 2022



This document has been prepared by Digby Wells Environmental.

<b>Report Type:</b>	Social Impact Assessment (SIA)
<b>Project Name:</b>	Pan African Resources PLC (PAR) Environmental Application Process
<b>Project Code:</b>	PAR7273

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- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting the specialist report relevant to this application, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing – any decision to be taken with respect to the application by the competent authority; and – the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- All the particulars furnished by me in this form are true and correct; and

- I realise that a false declaration is an offence in terms of regulation 48 and is punishable in terms of section 24F of the Act.



July 2022

*Signature of the Specialist*

*Date*

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## EXECUTIVE SUMMARY

### Introduction

Digby Wells Environmental (hereafter Digby Wells) has been appointed to undertake an Environmental Application Process and associated specialist studies for the Mogale Cluster – Mining Right (GP) 30/5/1/2/2 (206) Mining Right (MR) and, more specifically, for the proposed construction of a large-scale gold tailings retreatment operation. Pan African Resources PLC (PAR) has entered into a Sale and Purchase Agreement for the acquisition of the shares in and claims against Mogale Gold (Pty) Ltd (Mogale Gold). The agreement was entered into between PAR and the liquidators of Mintails Mining SA (Pty) Ltd (in liquidation) (MMSA). MMSA is the holding company of Mogale Gold. The intended transaction is subject to a due diligence investigation which is in the process of being concluded.

This report is a Social Impact Assessment (SIA) study which assesses the key impacts (negative and positive) of the construction of a tailing's retreatment operation on the host communities and assesses the mitigation and management of the impacts to enhance the positive and reduce the negative.

### Project Location

In terms of the geographical boundaries of the study area, the project is within the Mogale City Local Municipality (MCLM), which is located within the West Rand District Municipality (WRDM). MCLM is the regional services authority, and the area falls under the jurisdiction of the Krugersdorp Magisterial District. The project is about 4 km south of Krugersdorp and northeast of Randfontein, approximately 10 km off the N14 National Road in the Gauteng Province, in an area that has been transformed by past gold mining activities. Communities which are mostly affected are within the MCLM in wards 6,3,13,14,15,16, and 19. Due to the study affecting many wards, the impact assessment focuses on the municipal level and not the specific wards. This is with the consideration the socio-economic tapestry of the area is the same.

### Socio-economic Baseline and Stakeholder Concerns

Qualitative and quantitative methods were used to understand the socio-economic background of the area and the perceptions of the local community regarding the project. The socio-economic baseline profile was compiled through secondary and primary data through in-depth interviews. In summary, the population of MCLM is almost half the population (434 188) of the WRDM and increasing. There are approximately 132 205 households, and 20% are informal. The gender distribution is equal at 50%, and there is a high rate of the economically active group (18-64). Key social issues in the municipality include low attainment of education, high unemployment rate, challenges with illegal mining, high inequality and low to average access to service delivery.

The critical socio-economic concerns and legacy issues raised by the stakeholders include the following:

- Non- compliance with the Social and Labour Plan commitments;
- Unfulfilled promises by the mine towards community grievances such as damage of blasting to houses; and
- The unattended health and security hazards caused by the mine include groundwater contamination, contribution to air-borne diseases, and illegal mining, causing security issues in the community.

### Summary of Impacts

Based on the specialist understanding of the proposed infrastructure and activities, observations and engagement, the following impacts relevant during the construction, operation and closure phases have been identified. The impact assessment methodology is based on a rating that is designed to provide a numerical rating of the social impacts. Impacts are rated prior to mitigation or enhancement and again after consideration of the proposed mitigation or enhancement measures.

Phase	Impact	Rating	
		Before Mitigation	Post Mitigation
Construction	Creation of temporary employment opportunities	Minor - positive (40)	Minor - positive (60)
	Opportunities and capabilities within the supply chain	Minor - positive (50)	Moderate - positive (84)
	Impacts associated with project-induced population influx	Moderate - negative (-78)	Minor - negative (-55)
	Community health, safety and security	Moderate - negative (-78)	Minor - negative (-50)
	Community unrest due to a perceived lack of economic opportunities and unmet expectations	Moderate - negative (-78)	Minor - negative (-55)
Operation	Creation of employment opportunities	Minor - positive (52)	Moderate - positive (78)
	Opportunities and capabilities within the supply chain	Minor - positive (44)	Moderate - positive (90)
	Transfer of skills and training	Minor - positive (70)	Moderate - positive (77)

	Multiplier effects on the local municipality, district and provincial economy	Minor - positive (60)	Moderate - positive (78)
	Community development as part of the Social and Labour Plan	Minor - positive (70)	Moderate - positive (96)
	Community health and safety	Moderate - negative (-78)	Minor - negative (-50)
Decommissioning and Closure	Economic boom-bust	Moderate - negative (-90)	Minor - negative (-72)

## Conclusion

The aims of the Social impact assessment were to comply with NEMA EIA Regulations 2014 as they relate to specialist studies through the following:

- (a) A description of the methodology adopted in preparing the report.
- (b) A description of study limitations and constraints.
- (c) A description of the findings and potential implications of such findings on the impacts
- (d) of the Project.
- (e) Consideration of socio-economic benefits associated with the Project.
- (f) The provision of implementable mitigation and enhancement measures; and
- (g) Monitoring requirements for inclusion in the EMP or environmental authorisation.

To this end, the objectives of the study have been met in Sections 5 through 12 of this Report. Based on the study findings, Digby Wells has no objections to the Project proceeding if all mitigation and enhancement measures are considered for implementation.

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## ACRONYMS, ABBREVIATIONS AND DEFINITION

<b>Digby Wells</b>	Digby Wells Environmental
<b>DMRE</b>	Department of Mineral Resources and Energy
<b>EIA</b>	Environmental Impact Assessment
<b>EMPr</b>	Environmental Management Programme Report
<b>IFC</b>	International Finance Corporation
<b>LoM</b>	Life of Mine
<b>MCLM</b>	Mogale City Local Municipality
<b>MPRDA</b>	Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002)
<b>MRA</b>	Mining Rights Area
<b>MTIS</b>	Mineable tonnes in-situ
<b>NEMA</b>	National Environmental Management Act, 1998 (Act No. 107 of 1998)
<b>NGOs</b>	Non-governmental Organizations
<b>PCD</b>	Pollution Control Dam
<b>SIA</b>	Social Impact Assessment
<b>S&amp;EIR</b>	Scoping and Environmental Impact Reporting
<b>SLP</b>	Social and Labour Plan
<b>SMMEs</b>	Small, Medium and Micro Enterprises
<b>StatsSA</b>	Statistics South Africa
<b>SMP</b>	Social Management Plan
<b>WRDM</b>	West Rand District Municipality

Legal Requirement		Section in Report
(1)	A specialist report prepared in terms of these Regulations must contain-	
(h)	details of- (i) the specialist who prepared the report; and (ii) the expertise of that specialist to compile a specialist report including a curriculum vitae;	Page xiii
(i)	a declaration that the specialist is independent in a form as may be specified by the competent authority;	Page xiii
(j)	an indication of the scope of, and the purpose for which, the report was prepared;	Section 5.1
cA	And indication of the quality and age of the base data used for the specialist report;	Section 4
cB	A description of existing impacts on site, cumulative impacts of the proposed development and levels of acceptable change;	Section 8
(k)	The duration, date and season of the site investigation and the relevance of the season to the outcome of the assessment;	Section 5.3.2
(l)	a description of the methodology adopted in preparing the report or carrying out the specialised process inclusive of the equipment and modelling used;	Section 5
(m)	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 8
(n)	an identification of any areas to be avoided, including buffers;	-
(o)	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;	-
(p)	a description of any assumptions made and any uncertainties or gaps in knowledge;	Section 4
(q)	a description of the findings and potential implications of such findings on the impact of the proposed activity or activities;	Section 8
(r)	any mitigation measures for inclusion in the EMP;;	Section 9
(s)	any conditions/aspects for inclusion in the environmental authorisation;	
(t)	any monitoring requirements for inclusion in the EMP or environmental authorisation;	Section 10
(u)	a reasoned opinion (Environmental Impact Statement) -	Section 13

	whether the proposed activity, activities or portions thereof should be authorised; 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 EMP, and where applicable, the closure plan;	
(v)	a description of any consultation process that was undertaken during the course of preparing the specialist report;	Section 5.3
(w)	a summary and copies of any comments received during any consultation process and where applicable all responses thereto; and	Section 7
(x)	any other information requested by the competent authority.	-

## 1. Introduction

Digby Wells Environmental (hereafter Digby Wells) has been appointed to undertake an Environmental Application Process and associated specialist studies for the Mogale Cluster – Mining Right (GP) 30/5/1/2/2 (206) Mining Right (MR) and, more specifically for the proposed construction of a large-scale gold tailings retreatment operation. Pan African Resources PLC (PAR) has entered into a Sale and Purchase Agreement for the acquisition of the shares in and claims against Mogale Gold (Pty) Ltd (Mogale Gold). The agreement was entered into between PAR and the liquidators of Mintails Mining SA (Pty) Ltd (in liquidation) (MMSA). MMSA is the holding company of Mogale Gold. The intended transaction is subject to a due diligence investigation which is in the process of being concluded.

Mogale Gold owns the right to extract and process gold from tailings recourses by reprocessing old gold mine slimes dams and sandy mine dumps left by the extensive historic mining activities that have taken place in the area since 1888. PAR is only interested in the surface operations associated with Mining Right (MR) 206 (i.e., Tailings Storage Facilities (TSFs) for reclamation, processing and deposition), and therefore the focus of this application process.

This report constitutes a Social Impact Assessment (SIA) study which assesses the key impacts (negative and positive) of the construction of a tailings retreatment operation on the host communities and assess the mitigation and management of the impacts to enhance the positive and reduce the negative.

## 2. Project Description

PAR plan to undertake activities relating to reclamation associated with gold-bearing TSFs) through hydraulic reclamation. Digby Wells were appointed as the Independent Environmental Consultant to undertake the EIA Application process which comprises of an Air Emission Licence (AEL) and Water Use Licence (WUL) for the proposed gold-bearing TSFs.

The site is located in the West Rand, in Gauteng Province. The site comprises of existing infrastructure such as sand dumps, Lancaster Dam and an open pit that will be used for the deposition of tailings materials. A process plant, overland pumping and piping inclusive of associated water management infrastructure will form part of the proposed infrastructure that will require an authorisation. Once the open pit is filled to capacity, a new TSF will potentially be constructed on the footprint area of one of the reclaimed TSF sites (1L23-1L25) (Figure 1-1). The footprint of the area is 2,923.3 ha which considers MR 206 and associated infrastructure.

Ancillary infrastructure such as pipelines, powerlines and pumps will be required for the proposed reclamation activities and will be included in support of the Environmental Application Process, which will be undertaken.

## 2.1 Project Locality

The Mining Right Area of the Mintails Mogale Cluster includes: G1, G2 plant; Cams North Sand; South Sand; 1L23; 1L28; 1L13; 1L8; 1LI0; West Wits Pit (WWP) and Lancaster Dam. An existing Water Use License (WUL) No. 27/2/2/C423/1/1 was issued on 22 November 2013 to Mintails Mining SA (Pty) Ltd: Mogale Gold. The mining right is located on Portions 66 and 99 of the farm Waterval 174 IQ and portions 136 and 209 of the farm Luipaardsvlei 246 IQ.

The project is within the Mogale City Local Municipality (MCLM), which is located within the West Rand District Municipality (WRDM). MCLM is the regional services authority and the area falls under the jurisdiction of the Krugersdorp Magisterial District.

The site is located in the catchment of the Upper Wonderfonteinspruit, quaternary catchment C23D, which forms part of the Vaal River Water Management Area (WMA) within the Vaal Catchment Management Agency (CMA). The project is about 4 km south of Krugersdorp and north-east of Randfontein, approximately 10 km off the N14 National Road in the Gauteng Province, in an area that has been transformed by past gold mining activities.

The project locality of the site is illustrated in Figure 2-1.

**Table 2-1: Summary of the PAR Project Location Details**

<b>Province</b>	Gauteng
<b>District Municipality</b>	West Rand District Municipality
<b>Local Municipality</b>	Mogale Local Municipality
<b>Nearest Town</b>	Krugersdorp (4 km), Randfontein (4 km)
<b>GPS Co-ordinates (relative centre point of study area)</b>	26°07'45.54"S
	27°45'40.85"E



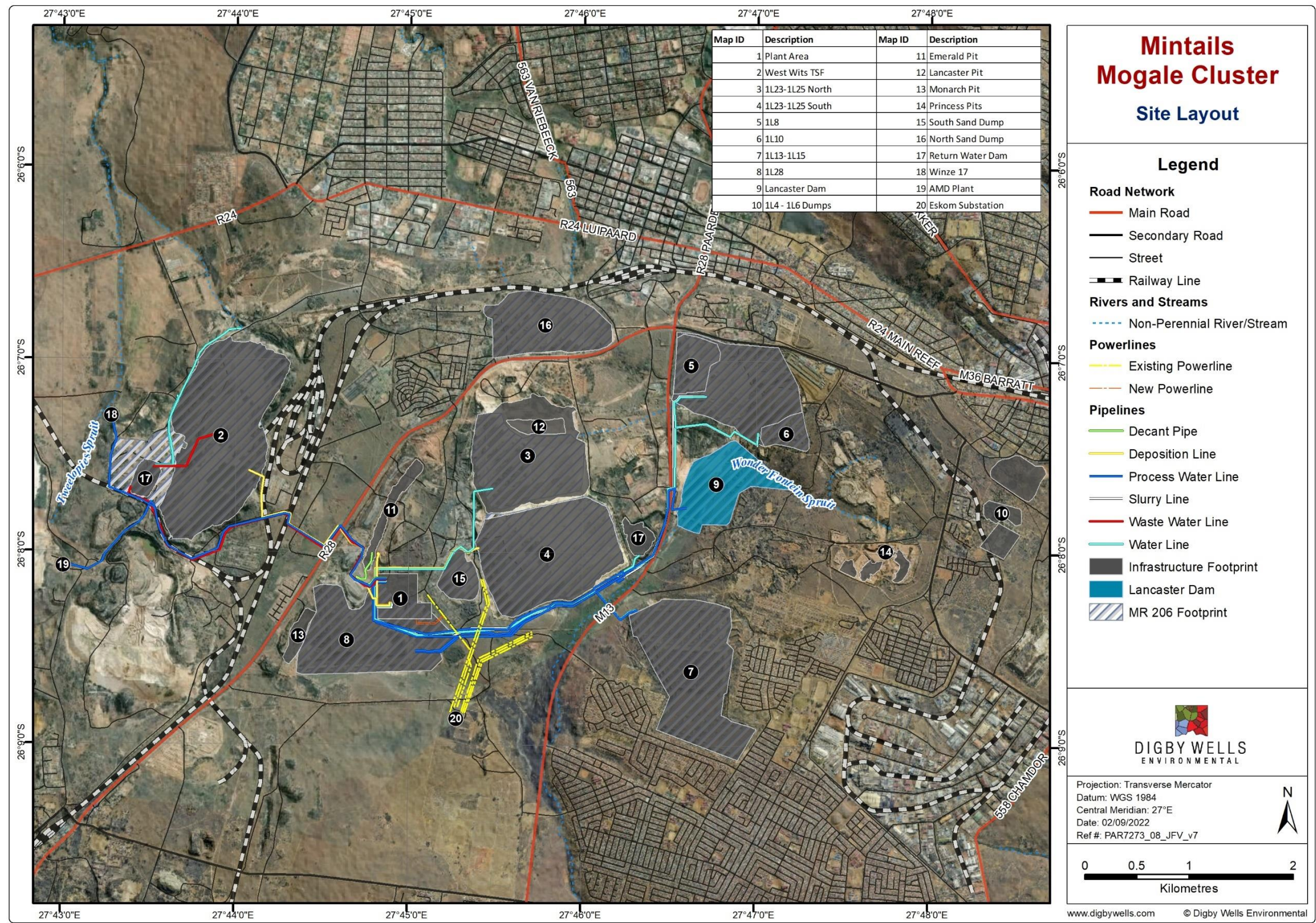


Figure 2-1: Project Locality



## 2.2 Proposed Infrastructure and Activities

**Table 0-2: Project Phases and Associated Activities**

Project Phase	Associated Activities
Construction Phase	Site clearing for the construction of the new processing plant facility and ancillary infrastructure such as pipelines, pump stations, electrical supply etc.
	Construction of the new processing plant and ancillary infrastructure such as pipelines, pump stations, electrical supply etc.
	Employment and procurement for construction related activities.
Operational Phase	Hydraulic reclamation of the associated historic tailings facilities and sand dumps
	Operation of pump stations during the operational phase.
	Maintenance of pipeline routes during the operational activities.
	Infilling of processed tailings material into the West Pits Pit and other potential pits.
	Surface tailings deposition within the West Wits Pit.
	Tailings deposition onto the historic footprint of 1L23-1L25.
	Production of Gold.
	Progressive rehabilitation of the new tailings facility footprints (West Pits TSF and 1L23-1L25 TSF).
	Employment and procurement for operational related activities.
Decommissioning Phase	Removal, decommissioning and rehabilitation of surface infrastructure such as pipelines, powerlines, pumps etc. footprints.
	Removal, decommissioning and rehabilitation of the processing plant footprint.
	Rehabilitation of the old TSF footprints.
	Rehabilitation of the old Mintails Processing Plant footprint.
	Final rehabilitation of the this facility.
	General rehabilitation of the surrounding area, including wetland rehabilitation.

## 3. Relevant Legislation, Standards and Guidelines

There is currently no legislation in South Africa that directly regulates the development of SIAs. The SIA has been completed in terms of NEMA Environmental Impact Assessment (EIA) Regulations, 2014 (as amended) Appendix 6: Specialist Reports. Where applicable, the Report uses references from the International Finance Corporation's (IFC) Performance

Standards and the Equator Principles 1 and 5 guiding how to identify risks, impacts and develop a Social Management Plan (SMP). The standards are designed to help avoid, mitigate, and manage risks and impacts as a way of doing business sustainably, including stakeholder engagement.

Some laws govern stakeholder engagement, and these, either directly or indirectly, inform the socio-economic context of SIA studies. The relevant legislation and other regulatory guidelines are briefly summarised in Table 3-1 below:

**Table 3-1: Applicable Legislation, Regulations, Guidelines and By-Laws**

<b>Legislation, Regulation, Guideline or By-Law</b>	<b>Applicability</b>
<b><u>Constitution of South Africa (Act 7 of 1996)</u></b> The Constitution emphasizes human rights with the intention of establishing a “society based on democratic values, social justice and fundamental human rights.	The SIA considers ways to promote equality and the advancement of human rights and freedom.
<b><u>National Environmental Management Act (Act 107 of 1998)</u></b> The National Environmental Management Act (NEMA) defines environment as the natural, physical, chemical, aesthetic and cultural properties affecting a person’s health and wellbeing. It further stipulates that sustainable development requires an integrated approach to social, economic, and environmental factors to ensure that development serves present and future generations.	The SIA considers other specialist studies to ensure that the socio-economic environment also considers the effect of biophysical, aesthetic, and cultural environments on people’s health and well-being.
<b><u>Mineral and Petroleum Resources Development Act (Act 28 of 2002), as amended</u></b> The Mineral and Petroleum Resources Development Act (MPRDA) requires all mining companies to assess their social impacts from start to post-closure. The 2018 Mining Charter furthermore requires that neighbouring communities must hold 8% of the mining right (usually done through community trusts) and the payment of 1% EBITDA (earnings before interest, taxes, depreciation, and amortisation) are paid to communities and employees as a trickle dividend from year 6 of the mining right.	The SIA sets the tone for the Social and Labour Plan (SLP) as it highlights socio-economic impacts and mitigation measures. The latter can often be utilised to inform community development projects as part of the mine’s commitments to mine community development.
<b><u>Municipal Systems Act (Act 32 of 2000)</u></b> The Municipal Systems Act provides for the principles, mechanisms and processes that are necessary to enable municipalities to move progressively towards the social and economic upliftment of local communities, and to ensure universal access to essential services that	Any development, whether because of the Project directly or as a spin-off from the Project, should consider the local municipality’s SDF and IDP.

Legislation, Regulation, Guideline or By-Law	Applicability
are affordable to all. In accordance with this Act, all municipalities are required to develop and implement a five-year Integrated Development Plan (IDP) and Spatial Development Framework (SDF) for their areas of jurisdiction.	

## 4. Assumptions, Limitations and Exclusions

The study was conducted based on the following assumptions and limitations

- No Socio-economic survey was conducted for the SIA. The socio-economic baseline information relies on publicly available information sourced from the Statistics South Africa website, district, and local municipalities' Integrated Development Plans.
- Consultations of the SIA were with selected stakeholders only. This does not form part of the Public Participation Process (PPP).
- The aim of the SIA is to identify possible social and economic impacts that could occur in the future. These impacts are based on existing baseline information. There is thus always an uncertainty regarding the anticipated impacts happening and the intensity thereof, however, the impact predictions have been made as accurately as possible.
- Sources consulted are not exhaustive and additional information can still come to the fore to influence the contents, findings, ratings, and conclusions made.
- An overall rating for the possible decommissioning and closure phase impacts have been included, however it is recommended that the socio economic impacts be re-assessed at the time of the decommissioning as the local dynamics could have changed.

## 5. Methodology

This section describes the study terms of reference and methodology.

### 5.1. Terms of reference

The Terms of Reference (ToR) for the study are:

- To develop the baseline questionnaire to conduct interviews as a way to understand the socio-economic and background of the communities;
- Describe the socio-economic baseline information for the proposed Project area and surrounding areas;

- Conduct consultations with relevant authorities including local municipality, councillors and local community forums and any identified Interested and Affected Persons (I&APs);
- Identify, describe, and assess the expected socio-economic impacts that may arise because of the proposed Project; and
- Recommend appropriate mitigation measures and management actions to avoid or minimise potential negative impacts and enhance the positive impacts associated with the proposed Project.

## 5.2. Definition of the Study Areas

The International Finance Corporation (or IFC) defines a study area as “an area that is likely to experience impacts arising from, or exert influence on, the Project or activity being assessed”. Three interdependent study areas were identified for the purposes of this study and correspond, where relevant, to the existing administrative boundaries. Areas that are likely to experience Project impacts were identified and categorised as follows:

**Table 5-1: Definition of Study Area**

Area of influence	Definition
Regional study area	This refers to areas that will experience <b>indirect or induced</b> impacts which are mainly by-products impacts experienced by the primary and secondary areas. These can include aspects such as increased pressure on local services and resources, and thus an increased demand for goods and services. This area includes the Gauteng Province
Secondary study area	This refers to areas likely to experience <b>indirect</b> Project impacts such as economic pull which includes job creation, in-migration of workers, multiplier effects in the local and regional economy- all of which can lead to an increased risk of pathologies and community conflict. This area will include the West Rand District Municipality (WRDM)
Primary study area	This refers to areas likely to experience <b>direct</b> impact (positive and/or negative) due to their proximity to the Project footprint. These areas will include the Mogale Local Municipality (MCLM)

Due to the large number of wards in the Project area, the baseline description focuses on the local municipality. Where possible, information is presented for the directly affected wards, as the implications of the project will likely be more significant at the ward level than at the local municipality level.

## 5.3. Data Collection

The information presented in this report was obtained through the following data collection methods.

### 5.3.1. Secondary Data Collection

A desktop review of available documentation was undertaken to obtain relevant socio-economic baseline information on the defined study areas. Documents reviewed include:

- Socio-economic and demographic statistics sources from StatsSA census data 2011 and 2016 community survey. The datasets are used as the primary source of the desktop to prepare the baseline socio-economic profile of potentially affected areas;
- Provincial reports, district, and local municipality IDPs and Local Economic Development (LED) plans. These include the WRDM IDP (2020/21), MCLM IDP (2021/22-2025/26) and COGTA West rand district municipality profile.
- Available maps and satellite imagery.

### 5.3.2. Primary Data Collection

The impact assessment is informed by the data collected by the specialist during the site visit and consultations.

- The site reconnaissance was undertaken in October 2021. The purpose of the site visit was for the specialist to familiarize themselves with the study area and gain an understanding of the salient social issues and concerns.
- **Key informant interviews** were conducted in November 2021. The purpose of the engagements were to provide an overview of the Project to the stakeholders and to get an understanding of the local socio-economic dynamics. The following stakeholders were engaged:
  - MCLM Economic Facilities Management Manager;
  - MCLM Acting Economic Development Services Manager;
  - Members of the community and
  - Community organisation.
- The impact assessment also considers or incorporates the comments received from the public participation process.

### 5.3.3. Compilation of the Baseline Profile

The socio-economic baseline of the study area is based on the information gathered through the desktop review, site visit and primary data. The profile was compared against the regional and secondary area. The baseline conditions were categorised as follows:

- Baseline conditions within the regional and secondary area were categorised as follows:
  - Geographical setting;
  - Population demographics;

- Household characteristics;
- Economic and livelihood activities; and
- Household access to public services and infrastructure.
- Baseline conditions within the primary study area
  - Historical Background;
  - Geographical setting;
  - Political and governance;
  - Population demographics;
  - Household characteristics;
  - Education profile;
  - Economic and livelihood activities;
  - Household access to public services and infrastructure;
  - Health; and
  - Perceptions, attitudes, and concerns of the local community

## 6. Socio-Economic Baseline Profile

The following section presents the socio-economic profile of the study areas.

### 6.1. Baseline Conditions for Gauteng Province

Gauteng Province covers 18,176 square kilometres (km<sup>2</sup>) and is the most populous province in South Africa. The province is bordered by Mpumalanga, Limpopo and the Northwest Provinces. The province is divided into three metropolitan municipalities: the City of Johannesburg metropolitan, the City of Tshwane Metropolitan and the City of Ekurhuleni Metropolitan Municipality. It also includes two district municipalities, Sedibeng District Municipality and West Rand District Municipality.

Based on the HIS Markit (2021), Gauteng had an estimated 15,035, 751 of the country's total population, an increase of almost 2 million people from 2016. On average, there are 827 13 people per km<sup>2</sup>. The ratio of males and females is equal at 50% respectively. Approximately 81% of the population are Black African, 13% are Whites, 3% are Coloureds, and 3% are Asians. The most spoken languages in the Gauteng province are traditional African (IsiNdebele; IsiXhosa; IsiZulu; Sepedi; Sesotho; Setswana; Siswati; Tshivenda, and Xitsonga) (76%), followed by English (16%), Afrikaans (6%) and other languages (1%).

In terms of the age distribution, the province has a high percentage of people between 20-74 years (67%), followed by those under 20 years old (31%) and individuals over 75+ years old (2%). The general age distribution means that most of the population can be productive and

contribute immensely positive to the economy's growth. Regarding the education profile, just over 58% of eligible people in Gauteng have completed matric or higher education.

The predominant economic sectors in Gauteng include finance, community services, manufacturing, trade and transport, among others. The province's employment rate is at 67%, compared to the unemployment rate (41%) of the province. The other portion of the population is either not economically active (19%) or discouraged work seekers (4%).

The human development index for Gauteng province is 85%. Overall, the majority of the population (56%) has adequate access to public services and infrastructure at the regional level, with most households having access to water, electricity flush and/ or chemical toilets and refuse collection by regional or local service providers

## **6.2. Baseline Conditions of West Rand District Municipality (WRDM)**

The West Rand District Municipality (WRDM) is located on the Southwestern edge of the Gauteng Province, transverse by major roads such as the N12 and the N14. WRDM is positioned close to the economic hub of Gauteng. It extends from Randfontein in the west to Roodepoort in the east<sup>1</sup> and includes the town of Krugersdorp. Bojanala Platinum borders it to the north-west, the City of Tshwane to the north-east, the City of Johannesburg to the east, Sedibeng to the south-east and Dr Kenneth Kaunda to the southwest.

WRDM comprises three local municipalities, namely, Merafong City Local Municipality (MerCLM), Mogale City Local Municipality (MogCLM) and Rand West City Local Municipality (RWCLM). The cities in the district include Carterville, Fochville, Krugersdorp, Magaliesburg, Muldersdrift, Randfontein, Wedela and Westonaria.

The total population of WRDM is 908 354. On average, there are 222 23 people per km<sup>2</sup>. The population increased by approximately 53 963 from 2016. The population growth rate from 2016 to 2021 is at 6%. The population of WRDM is projected to reach over one million by 2030. This is because of the migration patterns largely due to mining in the area. MogCLM is the biggest municipality by population, followed by RWCLM and MerCLM. There are slightly more males (50%) than females (50%). The gender distribution can be attributed to the mining area attracting more males for economic opportunities. Most of the population are between the ages of 20-74 (65%), followed by those under 20 (33%). The older people above 65 constitute 6% of the population.

The dominant population group is African (82%), followed by whites (8%). The predominant language spoken is Setswana (39%) followed by IsiZulu (12%), Sesotho (11%) and IsiXhosa (10%). The diversity can be because the district is a mining area, receiving populations from different regions.

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<sup>1</sup>Municipalities of South Africa, 2021



The district has approximately 4 087 km<sup>2</sup> of land and is home to the Cradle of Humankind World Heritage Site<sup>2</sup>. The area is endowed with abundant pockets of land with medium to high agricultural potential and favourable climatic conditions<sup>3</sup>. The WRDM forms part of the Maize Triangle, and consequently, the Gauteng Provincial Government is reinforcing this strength by investing in the area as part of the roll-out of Agricultural Hubs.

The West Rand remains the poorest region contributing to Gauteng's GDP. Its main contribution lies primarily within the mining sector. The two biggest drivers of economic activity within the WRDM are community services (24%) and mining (22%), contributing to the district's output in 2021. WRDM experienced a decrease in mining from 29% in 2018 to 22% in 2021. The mining sector experienced a decrease in gold reserves, rising input costs and the stagnant international price of gold. This caused a lot of retrenchments in the mining industry.

Other economic sectors include finance (19%), manufacturing (12%), trade (11%) and transport (5%). The district is the fifth-largest contributor to the province's economic activity, accounting for roughly 4% of the province's total output.

The municipalities in WRDM have different developmental limitations, such as the prevalence of dolomitic conditions; however, even with these, the West Rand region has the potential to attract development towards the western part of Gauteng<sup>4</sup>.

### **6.3. Baseline Conditions for Mogale City Local Municipality (MCLM)**

#### **6.3.1. Historical Background**

MCLM gets its name from Chief Mogale, one of the first freedom fighters in the country. Mogale directly translated as 'the brave one', signifying the bravery of the Chief to restore the ancestral land to his people. Chief Mogale belongs to the Ba-Po Chieftom of the Batswana clan. The Po tribe occupied the land stretching from the Magaliesberg in the west to the Northcliff Ridge in the east, to the Vaal River in the southwest and Haartebeespoort Dam in the northwest, now known as Mogale City<sup>5</sup>.

MCLM is also the birthplace of humankind, the city of Human Origin (Cradle of Humankind). Over 1550 specimens have been discovered and extracted at the Cradle of Humankind including the skull of Mrs. Ples aged 2.2 million years and Homo Naledi, an extinct species of hominin. The Cradle of Humankind is UNESCO's World Heritage Site.

<sup>2</sup> CoGTA, 2020: Rand West District Municipality Profile, available at: [https://www.cogta.gov.za/ddm/wp-content/uploads/2020/07/West\\_Rand\\_District\\_Profile.pdf](https://www.cogta.gov.za/ddm/wp-content/uploads/2020/07/West_Rand_District_Profile.pdf)

<sup>3</sup> WRDM IDP 2016/17 to 2020/21 as revised in 2018/19

<sup>4</sup> WRDM IDP 2016/17 to 2020/21 as revised in 2018/19

<sup>5</sup> <https://www.environment.co.za/documents/environment-reports/state-of-the-environment-mogale/background.pdf>

### 6.3.2. Geographical Setting

MCLM forms part of the West Rand District Municipality. It is situated in the Western part of the City of Johannesburg (CoJ) and in the South of the City of Tshwane (CoT). The municipality is bordered by Merafong City Local Municipality and the Rand West City Local Municipality. It is accessible from major centres of Gauteng and Northwest provinces such as Johannesburg, Pretoria, Midrand, Hartbeespoort Dam, Randfontein, and Soweto<sup>6</sup> but has a strong functional urban link with Johannesburg. Krugersdorp is the major CBD of the municipality. The municipality occupies five per cent of the provincial land and covers an area of 110 000 hectares.

MCLM is made up of a combination of urban and rural areas, reflecting different levels of development. There are a total of 39 clustered wards which were re-demarcated from 34 wards in 2011. The main areas in MCLM include:

- Kagiso, Rietvallei and Azaadville;
- Krugersdorp suburbs, and Munsieville; and
- Muldersdrift, Tarlton, Magaliesburg, Kromdraai and Hekpoort.

### 6.3.3. Political and Governance

MCLM was established in 2000. In line with the Demarcation Board's 'wall-to-wall' concept for Municipalities, Mogale City became the successor in title of the former Krugersdorp Local Council, the Magaliesburg Rural Council, and a portion of the Magaliesberg Local Area Committee<sup>7</sup>.

The municipality is a Category B, meaning it shares its municipal executive and legislative authority with the district municipality. The municipality consists of a political structure, an administrative component, and the community.

The municipal council consist of seventy-seven members: as of 1<sup>st</sup> November 2021. The African National Congress (ANC) has a plurality of thirty-one seats. Of the seventy-seven members, thirty-nine are ward councillors, and thirty-eight are multi-party representatives.

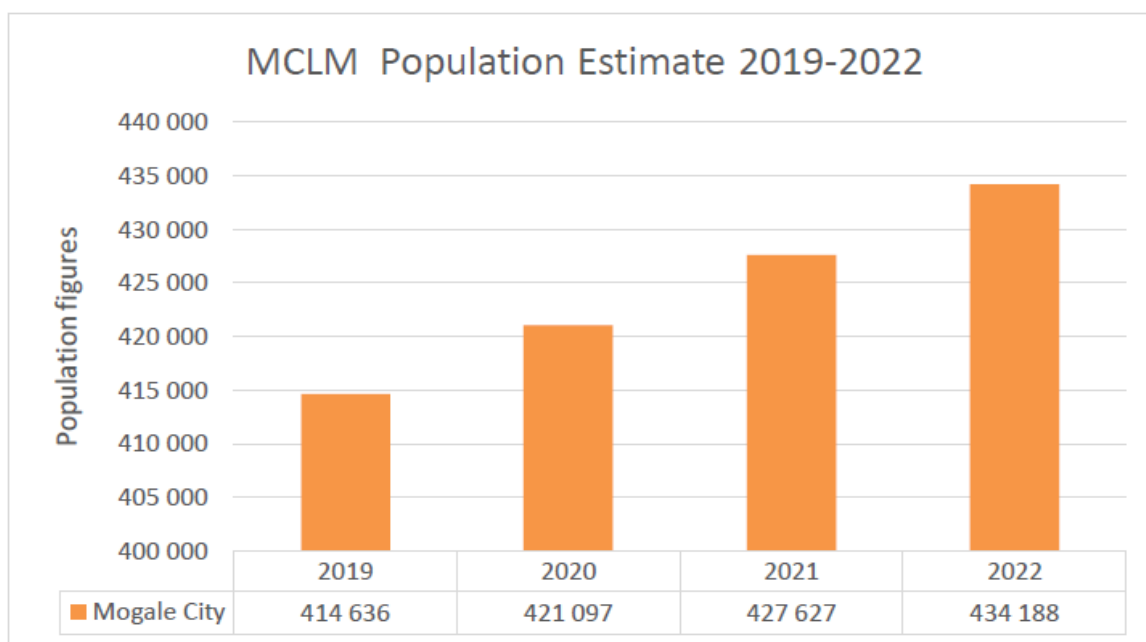
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<sup>6</sup> Mogale City Local Municipality IDP 2020/21

<sup>7</sup> Ibid

### 6.3.4. Population Size

MCLM is the most populated local municipality in the West Rand District. According to IHM Markit 2021, the population of MLM is 434 188 which is almost half the population of WRDM. The population size is not static, expecting it could have changed over time depending on the natural population growth and migration patterns in and out of the area. The population growth rate of MCLM is the highest in the district, with an average annual growth rate of approximately 2%. According to IHS Markit, the population is expected to increase over time as illustrated in Figure 6-1. On average there are 315 79 people per km<sup>2</sup>.



Source: HIS Markit

**Figure 6-1: Population of MCLM**

### 6.3.5. Household Characteristics

MLM has 132 205 households, of which just over 21% were characterized as informal dwellings. Table 6-1 summarises other household characteristics of MCLM.

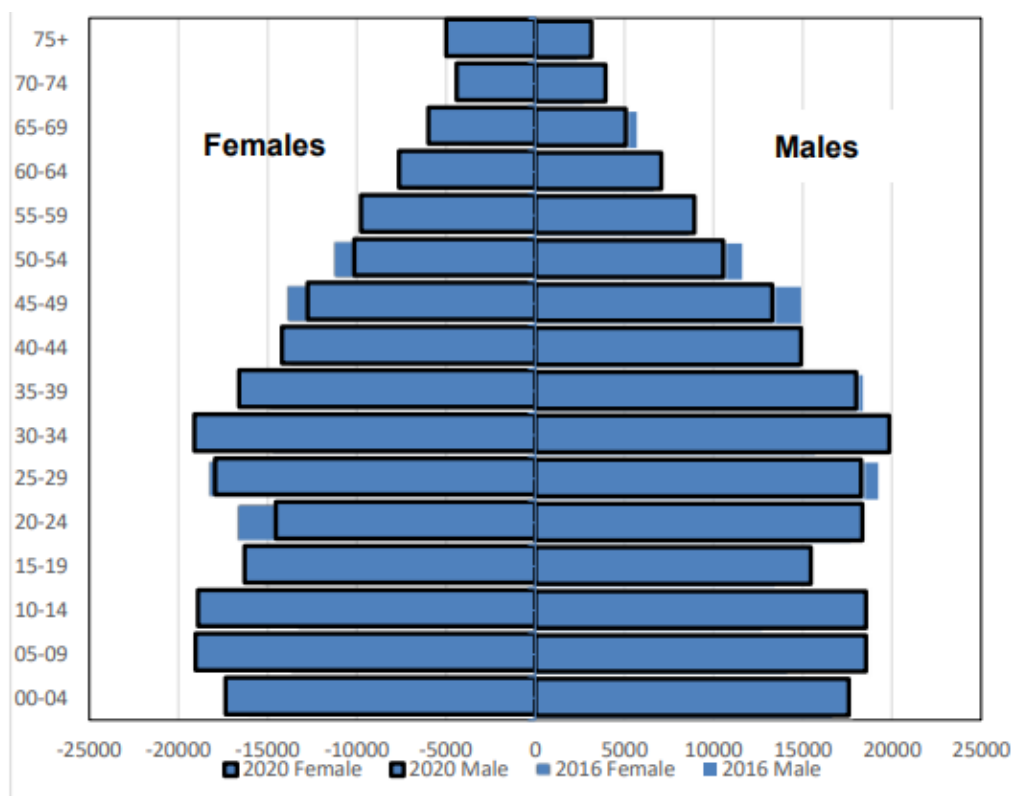
**Table 6-1: Household Characteristics**

Indicator	MCLM
Number of households	132 205
Household size	2.6
Female-headed households	32%
Effective dependency ratio	39

### 6.3.6. Gender and Age Distribution

The gender and age distribution are important to understand because it indicates the labour capacity of the area. The gender distribution was equal at 50% in 2020, which shifted to 50% females and 50% males in 2021. The gender distribution can be attributed to birth trends. Most males and females are between the ages of 30-34 (HIS Markit).

According to the data, there is a high rate of an economically active group (18-64). The majority (approximately 60%) of the population are under 35. This indicates that the municipality will provide an active population for labour. Figure 6-2 provides an overview of the gender and age distribution.



Source: MLCM IDP 2021/22-2025/26

**Figure 6-2: Gender and Age Distribution**

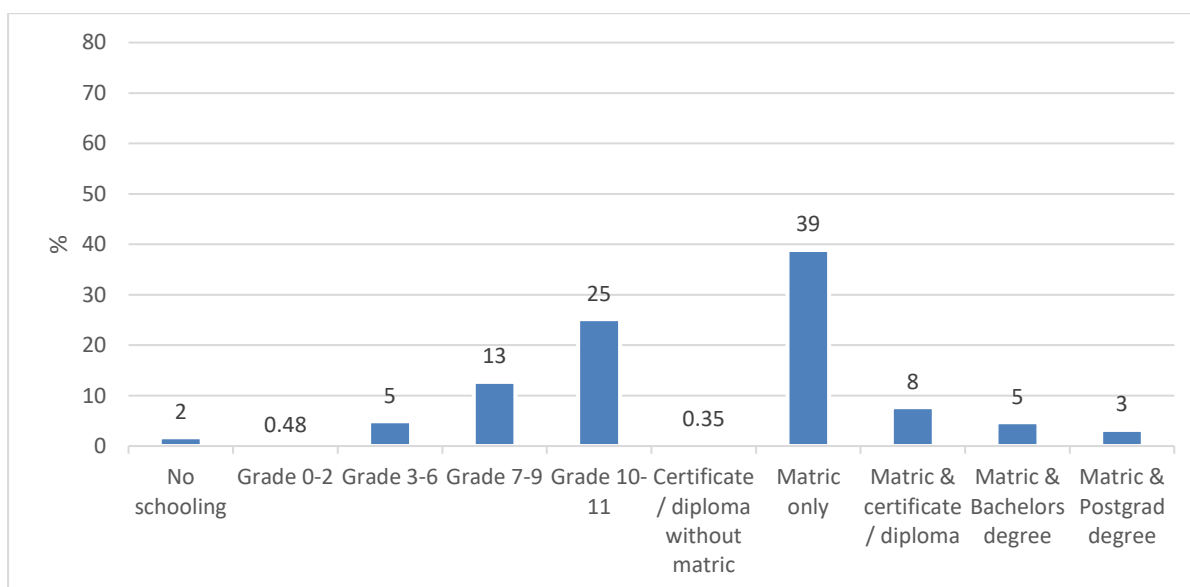
### 6.3.7. Ethnicity and Language

As indicated in section 6.3.1, The first people to occupy Mogale City historically were the Batswana Clan. The dominating ethical group are Africans (78%), followed by whites (21%). The most spoken languages are Setswana (41%), IsiZulu (15%). Other languages include English (12%), Afrikaans (9%), IsiXhosa (6%), and Sesotho (5%). The diversity in the municipality can be attributed to the mining sector which attracts people from all over the country. The ethnic and language distribution in MCLM is similar to the district.

### 6.3.8. Education Profile

According to the WRDM profile<sup>8</sup>, between 2008 and 2018, the number of people with education in the district and municipality has improved. Even though there has been an improvement in education levels, the African population is less qualified in terms of the attainment of both matric and tertiary qualification compared with other population groups in the district and municipality.

In the year 2021, the percentage of children between 5 to 15 years + who were reported to attend school is (43%). The majority (39%) of population have grade 12/matric, followed by some secondary (25%). A low percentage (16%) have attained higher education through undergraduate and postgraduate studies. Figure 6-3 summarises the education profile of MCLM.



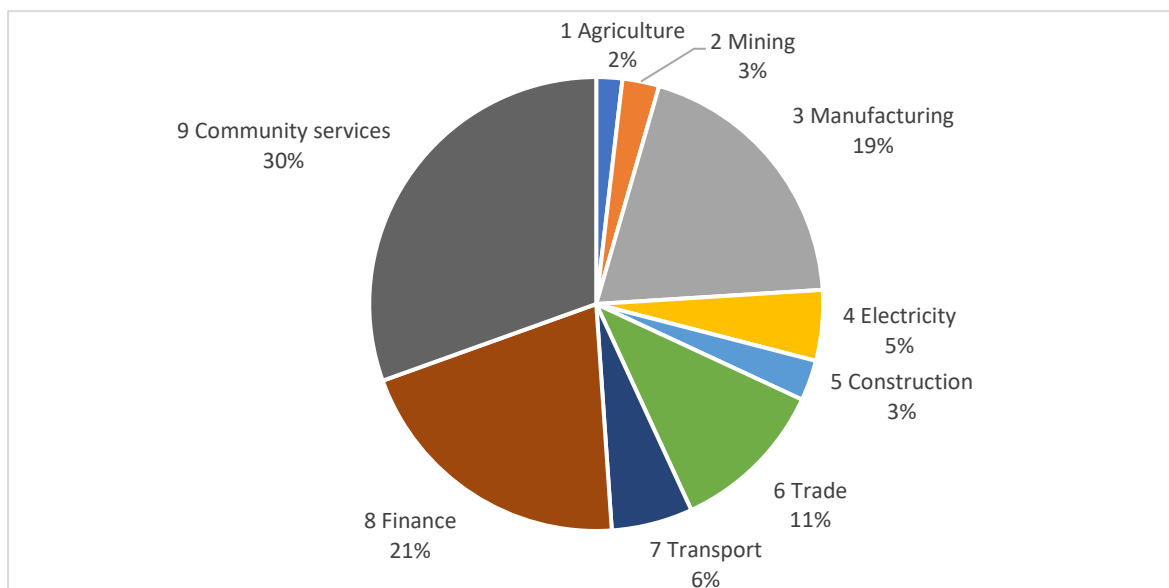
**Figure 6-3: Education Profile of MCLM**

### 6.3.9. Economic Development Indicators

The main economic sectors of MCLM in 2021 were community services (30%), finance (21%), manufacturing (20%), and trade (11%). MCLM is the economic driver of the district secondary sector, leading in manufacturing, construction, and electricity mainly concentrated around Krugersdorp. The manufacturing and construction sectors combined accounted for approximately 22% of the economic activity in 2021.

Krugersdorp has considerable manufacturing capacity and significant tourism attraction. Some of the attractions within MCLM include the motor-sport racing track that attracts international drag-racing events, the Cradle of humankind, the Magalies Meander, the Sterkfontein caves and the Krugersdorp Game Reserve.

<sup>8</sup> [https://www.cogta.gov.za/ddm/wp-content/uploads/2020/07/West\\_Rand\\_District\\_Profile.pdf](https://www.cogta.gov.za/ddm/wp-content/uploads/2020/07/West_Rand_District_Profile.pdf)

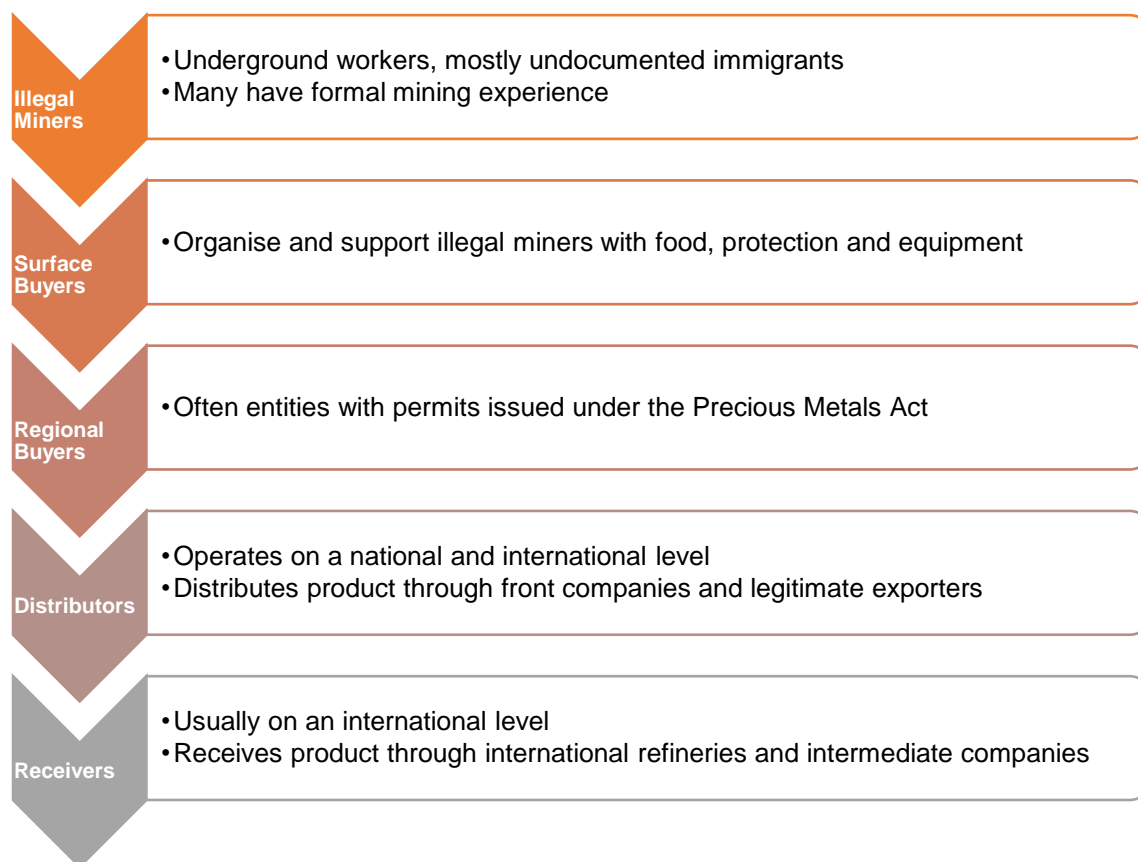


**Figure 6-4: Economic Sectors in MCLM**

### **Challenges in the Mining Sector**

Illegal mining is prevalent in WRDM, affecting mining companies, employees, and the entire community. Most Zama-Zamas (literally meaning those willing ‘to have a go’, ‘try your luck’ or ‘take a chance’) work shallow portions of long-abandoned mines where they abseil and slide down and up underground tunnels to extract gold. The mining industry estimates that there may be as many as 15,000 Zama-Zamas with deaths numbering at least 65 in 2015, a high death rate especially compared to 33 fatalities for the estimated 120,000 people employed in South Africa’s formal gold mines. The bulk of illegally mined gold is from the Zama-Zamas operating in commercial mines. The Minerals Council South Africa (2017) estimates that illegal mining costs the industry and fiscus more than R 20 bn per year in lost sales, taxes, and royalties.

A presentation prepared by Minerals Council South Africa (2017) states that illegal mining activities are linked to lucrative illicit trade – not only in precious metals, but also wildlife, weaponry, and drug trade at a global level. The illegal mining trade consists of a complex syndicate, as illustrated below:



**Figure 6-5: Value Chain in Illegal Mining**

In 2019, over 30 illegal miners were found with illegal ammunition and were arrested during a police raid in Krugersdorp. Recently, the community has reported a spike in illegal mining in Koomdrai, Kagiso 9. The police have developed a team that identifies hotspots for illegal mining activities and raid in those areas.

The economic costs of illegal mining are difficult to determine and estimate; however, some of the challenges of illegal mining to the communities include environmental impacts, community unrest and contribution to the high rate of crime.

#### **6.3.10. Labour force and employment**

According to the HIS Markit, the rate of employment and unemployment were almost the same in 2020 in MCLM with unemployment rate increasing and labour force participation rate decreasing. The labour force participation rate was reported in 2021 to be 58% in MCLM, 82.01% worked within the formal sector, while 18% worked within the informal sector. Table 6-2 demonstrate the level and sectors of employment below.

<sup>9</sup> Krugersdorp News, 2021

**Table 6-2: The Level and Sectors of Employment**

Employment Profile in MCLM	
	MCLM
Unemployed	55%
Employed	54%
Not Economically active	31%
Discouraged work seekers	12%
Formal	82%
Informal	18%
Private Households	10%
Do not know	

### 6.3.11. Household Income levels

The income distribution of MCLM is unequal. The Gini coefficient is 0.63 in 2021 from 0.625 in 2015. According to the HIS Markit, the average household income in the MCLM is R 8 277, which is below the national bound poverty line of R14, 724. Meanwhile, 0.01% of households were reported to have no income and 3% with household earnings between R2400-18000k. This means that a significant portion of households are living within the lower and upper-bound poverty line. In MCLM, people below the poverty line are 155, 028 and People above the poverty line are 217, 618. Table 6-3 provides a summary of the income levels.



**Table 6-3: Household Income**

Income Indicators	MCLM
0-2400	0.01%
2400-6000	0.11%
6000-12000	1%
12000-18000	2%
18000-30000	7%
30000-42000	8%
42000-54000	7%
54000-72000	10%
72000-96000	10%
96000-132000	10%
132000-192000	10%
192000-360000	12%
360000-600000	10%
600000-1200000	9%
1200000-2400000	4%
2400000+	1%

The food poverty level is the measure of households to afford and have access to basic nutritional food. Linking this to the Gini-coefficient and the household income levels, the number of households living below the poverty datum line in the municipality has increased from 16% in 2015 to 21% in 2019 and now to 24% in 2021.

### **6.3.12. Access to Service Delivery**

MCLM is primarily responsible for providing services, and WRDM provides a co-ordinating and monitoring function, seeking alignment in terms of the regional strategy of One Region, One Plan, One Action, and One System.

Some households in the municipality depend on free basic services. According to the Municipality, the criteria for households to qualify as indigents include:

- Earn R3760 or less per month as of 1<sup>st</sup> April 2020; and
- Be a registered account holder of the home.

The benefits of MCLM free services for households that qualify as approved indigents are:

- 100% subsidized rates payment;
- No Payment for refuse removal;

- 50kw for electricity;
- 6 Kilolitres of water, and
- Households in informal settlements receive access to free tanked water, chemical toilets and refuse removal through the supply of skip bins.

Table 6-4 provides a summary of service delivery.

**Table 6-4: Summary of Access to Service Delivery**

Indicator	MCLM
Access to water (piped inside house)	57%
Access to electricity	90%
Toilet facilities	96%
Refuse disposal by a service provider	82%

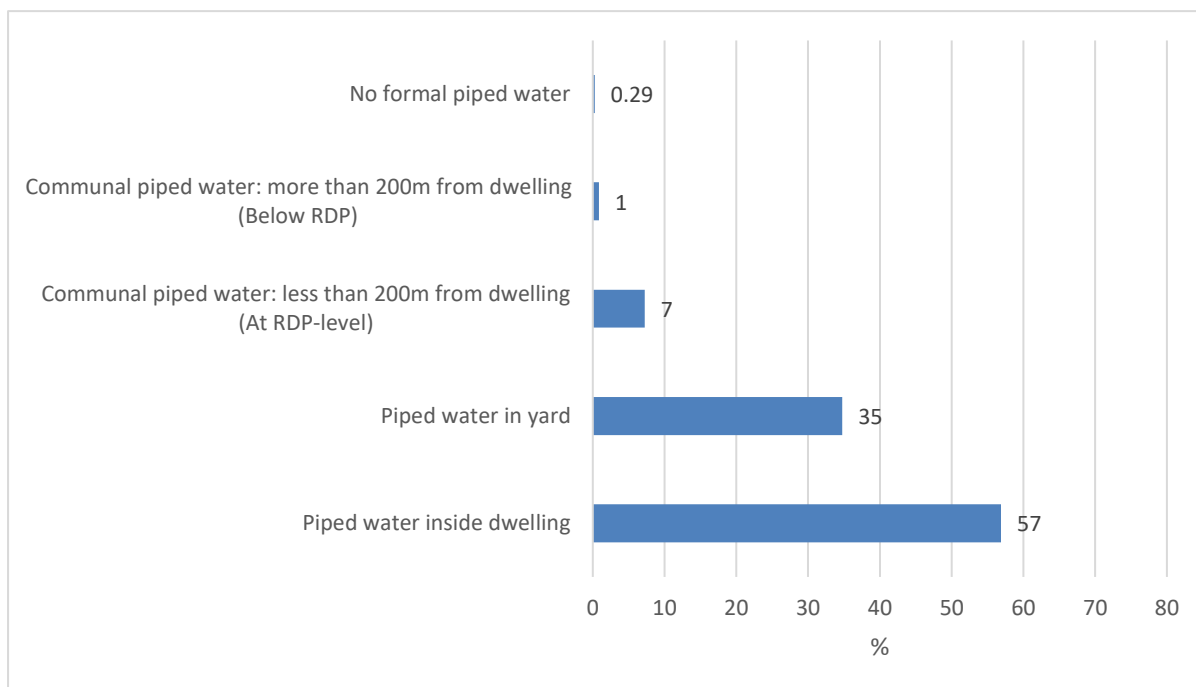
#### **6.3.12.1. Access to housing**

Housing delivery is a provincial competency led by the Provincial Department of Human Settlements. The housing (human settlements) mandate is derived from the Housing Act, Act 107 of 1997. The Act state that "Every Municipality must, as part of the municipalities process of integrated development planning, take all reasonable and necessary steps within the framework of national and provincial housing legislation and policy to initiate, plan, co-ordinate, facilitate, promote and enable appropriate housing development in its area of jurisdiction. Delivery of housing remains a huge challenge for the government. MCLM has an accumulating backlog for government-subsidized housing as per the National housing subsidy system. The primary cause for such a substantial backlog lies in slow-paced housing development.

In MCLM, 48% live in very formal houses, 30% live in formal houses, 21% live in informal dwellings, 0.38% in traditional and 2% in other dwelling type.

#### **6.3.12.2. Access to water**

Rand water is the bulk water supplier in the municipality. The water is pumped from the Vaal River, purified by Rand Waters Water Treatment Works, and distributed in bulk into the Local Municipalities' storage reservoirs. The local municipalities own and manage the local distribution infrastructure. On average, just over 20% of households in MCLM are getting water from a regional or local service provider. Other water sources include own services, water schemes and from a vendor, as illustrated in Figure 6-6.

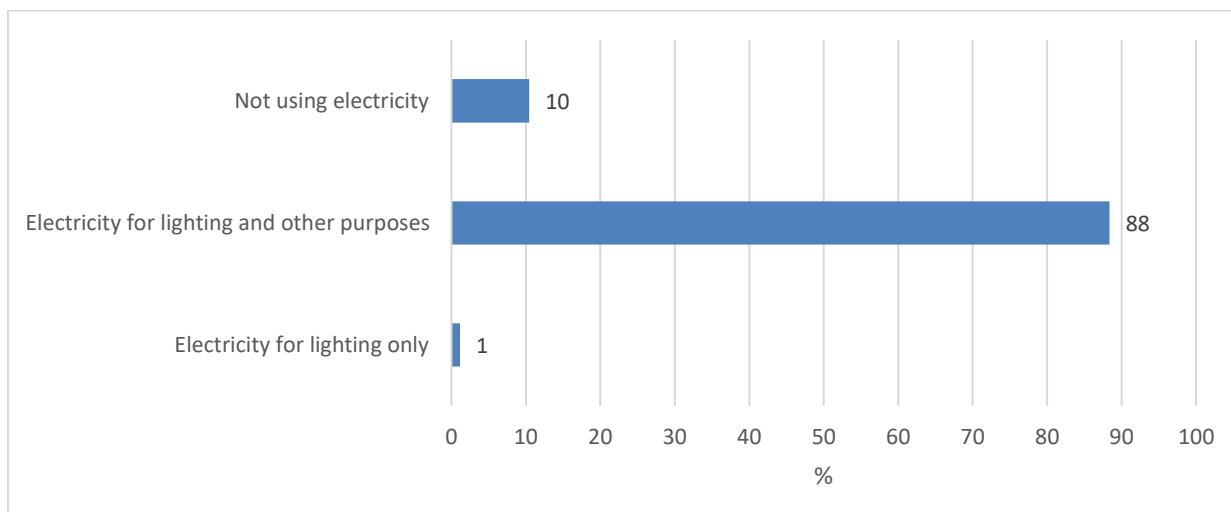


**Figure 6-6: Access to Water**

### **6.3.12.3. Access to electricity**

The bulk supplier of electricity in MLCM is Eskom. The municipality is responsible for distributing electricity to households, but in some instances, ESKOM acts as a direct. In MCLM, approximately 10% do not have access to electricity. Over 80% of households with access to electricity were mainly through the national grid.

In recent years, through the legislative provision of the Integrated National Electrification Programme (INEP), Department of Energy (DoE), Department of Cooperative Governance and Traditional Affairs (COGTA), Electricity Supply Commission (ESKOM) and MCLM have installed electricity in some informal settlements including Kagiso and set to install electricity in more informal areas.

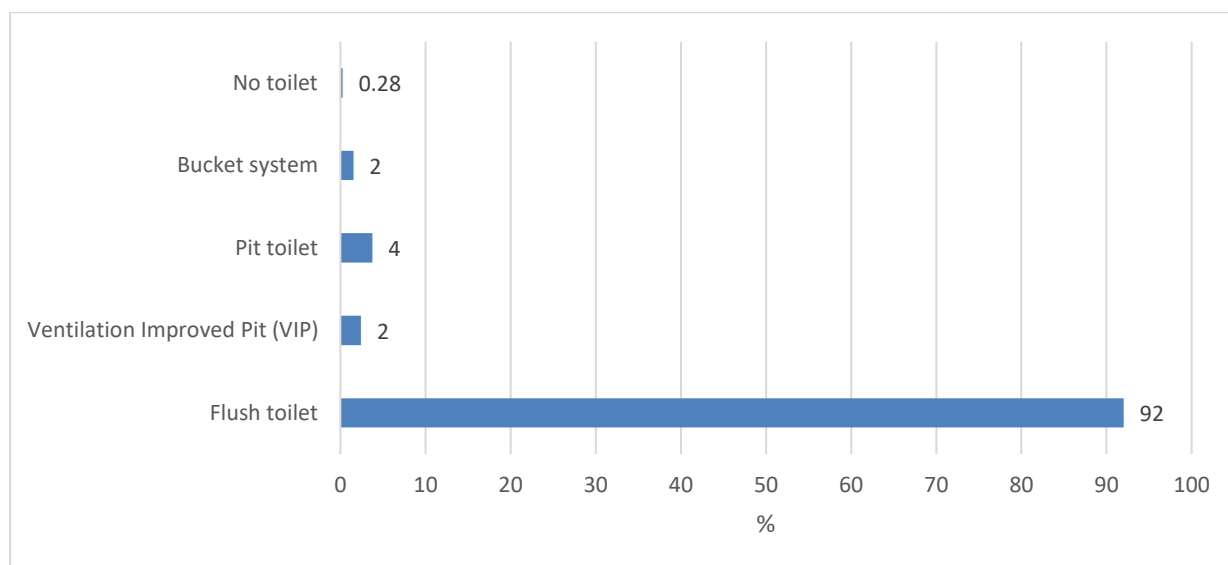


**Figure 6-7: Access to Electricity**

**6.3.12.4. Access to Sanitation**

MCLM is responsible for operating and maintaining all infrastructure pertaining to sanitation provision within the jurisdiction areas. This includes wastewater treatment works.

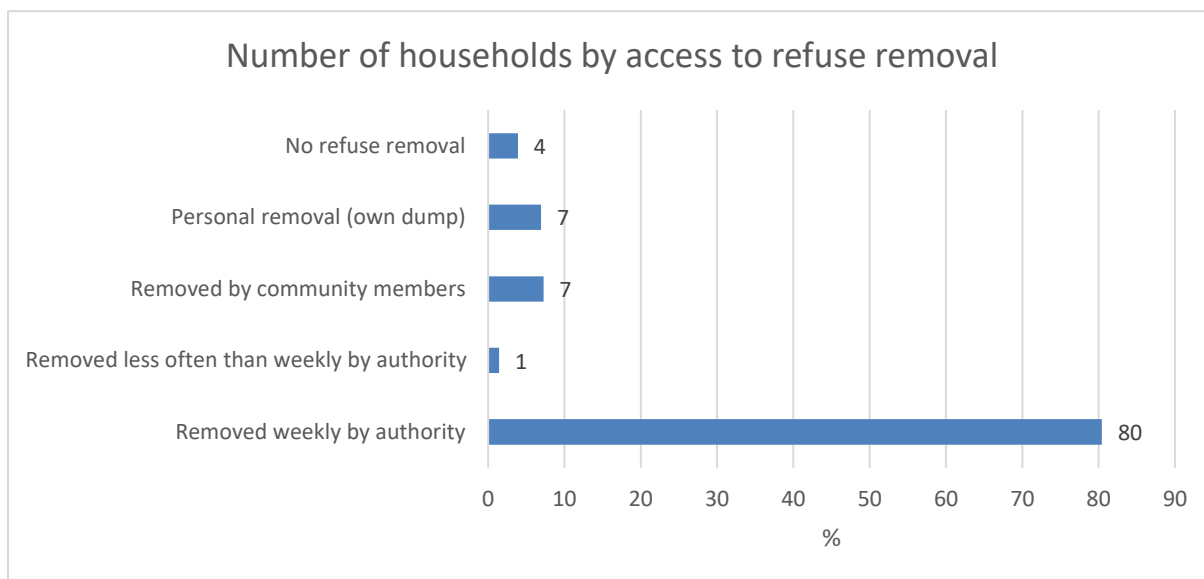
Most of the population in MCLM (92%) have access to a flushing toilet followed by a pit toilet (4%).



**Figure 6-8: Access to Sanitation**

**6.3.12.5. Access to Refuse Collection**

MCLM is responsible for waste collection, transport, and disposal of landfill sites. In the past, refuse collection in MCLM took place in selected areas, including Kagiso, Rietvallei, Munsieville, Krugersdorp CBD, and surrounding suburbs. Majority (80%) of the population rely on a service provider for waste collection, followed by those removed by community members (7%) and a small percentage depending on their dump (7%).



**Figure 6-9: Access to Refuse Collection**

MCLM has opened opportunities for private sector involvement in refuse removal in the city. MCLM focuses on expanding refuse collection to areas previously not serviced by the municipality. Households receiving local authority refuse removal services have increased by 28% between 2011 and 2016. Illegal dumping and littering are a challenge for the municipality.

#### **6.3.12.6. Access to Health Care Services**

Primary, secondary, and tertiary level health services are all Gauteng Provincial Health areas of competency.

According to the WRDM profile, there are 66 health care facilities in WRDM, and 40 of them are in MCLM. Of the 40 healthcare facilities, 18 are clinics, one district hospital, one regional hospital, and the rest are private healthcare facilities.

Some of the critical challenges in the overall health sector include:

- Improving access to healthcare (particularly in poor areas),
- Getting better value for money by strengthening procurement practices (for example, for medicines, vaccines, and medical equipment),
- Improving mental health and disability services, and
- increasing funding<sup>10</sup>.

<sup>10</sup> South African Country Report for the Eighteenth Session of the United Nations Commission on Sustainable Development (CSD-18) & Voluntary National Review (VNR) reports on South Africa's progress in achieving the 2030 Agenda for Sustainable Development (2019)

## 7. Results from Stakeholder Engagements

The community have a history of dissatisfaction with Mintails with regards to the following:

- Non-compliance with the Social and Labour Plan commitments;
- Unfulfilled promises by the mine towards community grievances such as damage of blasting to houses; and
- The unattended health and security hazards caused by the mine include ground water contamination, contribution to air-borne diseases, and illegal mining causing security issues in the community;

Table 7-1 outlines the comments raised during stakeholder engagements and the

Aspect	Issues/Concerns raised	Response
Compliance	How will the mine involve the community in the development of the SLP?	Section 8.3.5.2
	How will the mine ensure that they comply with the SLP commitments?	
Health and Safety	How is the mine planning to address the structural damage caused by blasting to the houses?	Section 8.2.4.2
	What measures are in place to clean up the environmental waste left at the mine? / Environmental rehabilitation?	
	How will the community be assisted with the dust fallout from the mine?	
	Historically there was a case of underground contamination; how will the mine prevent that occurrence in the future?	
	How will the mine assist with the illegal mining currently happening?	
Community development	How will the mine assist with community development, including providing infrastructure and assisting with access to service delivery?	Section 8.3.5.2

specialist response

Aspect	Issues/Concerns raised	Response
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Compliance	How will the mine involve the community in the development of the SLP?	Section 8.3.5.2
	How will the mine ensure that they comply with the SLP commitments?	
Health and Safety	How is the mine planning to address the structural damage caused by blasting to the houses?	Section 8.2.4.2
	What measures are in place to clean up the environmental waste left at the mine? / Environmental rehabilitation?	
	How will the community be assisted with the dust fallout from the mine?	
	Historically there was a case of underground contamination; how will the mine prevent that occurrence in the future?	
	How will the mine assist with the illegal mining currently happening?	
Community development	How will the mine assist with community development, including providing infrastructure and assisting with access to service delivery?	Section 8.3.5.2

**Table 7-1: Stakeholder Comments Received**

## 8. Impact Assessment

This section presents the impacts identified, assessed, and rated as part of this Report.

### 8.1. Assessment Methodology

The impact assessment methodology is based on a rating process that is designed to provide a numerical rating to the various social impacts identified. Impacts are rated prior to mitigation or enhancement and again after consideration of the proposed mitigation or enhancement measures. Mitigation measures are formulated to avoid or mitigate negative impacts, and enhancement measures to enhance positive impacts.

The post- mitigation/enhancement rating indicates the significance of residual impacts, while the difference between pre- and post-mitigation / enhancement ratings represents the degree to which the recommended measures are expected to be effective in mitigating or enhancing an impact. The methodology used to quantify the identified impacts is shown below.

**Significance = consequence of an event x probability of the event occurring**

where

**Consequence = Type of impact x (Intensity + Spatial Scale + Duration)**

and

**Probability = Likelihood of an impact occurring**

In the formula for calculating **consequence**:

**Type of impact = +1** (for positive impacts) **or -1** (for negative impacts)

**Table 8-1: Impact Ratings**

Rating	Criteria and Definitions	
	Negative Impacts (type of impact = -1)	Positive Impacts (type of impact = +1)
Intensity		
7	Irreversible damage to highly valued items of great sociocultural significance or complete breakdown of social order	Noticeable, on-going social benefits which have improved the livelihoods and living standards of the local community in general
6	Irreparable damage to highly valued items of sociocultural significance or breakdown of social order	Great improvement to livelihoods and living standards of a large percentage of population
5	Very serious widespread social impacts. Irreparable damage to highly valued socio-cultural items	On-going and widespread positive benefits to local communities which improves livelihoods
4	On-going serious social issues. Significant damage to structures / items of sociocultural significance	Average to intense social benefits to some people
3	On-going social issues. Damage to items of sociocultural significance	Average, on-going positive benefits, not widespread but felt by some
2	Minor medium-term social impacts on local population. Mostly repairable. Cultural functions and processes not affected	Low positive impacts experience by very few of population



Rating	Criteria and Definitions	
	Negative Impacts (type of impact = -1)	Positive Impacts (type of impact = +1)
1	Minimal social impacts, low-level repairable damage to commonplace structures	Some low-level social benefits felt by very few of the population
Spatial Scale		
7	<u>International</u> : The effect will occur across international borders	
6	<u>National</u> : Will affect the entire country	
5	<u>Province/ Region</u> : Will affect the regional study area and potentially the Mpumalanga Province	
4	<u>Municipal Area</u> : Affect will be limited to the local study area	
3	<u>Local</u> : Extending across the site and to nearby settlements within the local study area	
2	<u>Limited</u> : Limited to the site and its immediate surroundings (i.e., site-specific study area)	
1	<u>Very limited</u> : Limited to specific isolated parts of the site	
Duration		
7	<u>Permanent</u> : The impact will remain long after the life of the project	
6	<u>Beyond project life</u> : The impact will remain for some time after the life of the project	
5	<u>Project Life</u> : The impact will cease after the operational life span of the Project (20 years)	
4	<u>Long term</u> : 6-15 years	
3	<u>Medium term</u> : 1-5 years	
2	<u>Short term</u> : Less than one year	
1	<u>Immediate</u> : Less than one month	
Probability		
7	<u>Certain/ Definite</u> : There are sound scientific reasons to expect that the impact will occur	
6	<u>Almost certain/Highly probable</u> : It is most likely that the impact will occur	
5	<u>Likely</u> : The impact may occur	

Rating	Criteria and Definitions	
	Negative Impacts (type of impact = -1)	Positive Impacts (type of impact = +1)
4	<u>Probable</u> : Has occurred here or elsewhere and could therefore occur	
3	<u>Unlikely</u> : Has not happened yet but could happen once in the lifetime of the project, therefore there is a possibility that the impact will occur	
2	<u>Rare/ improbable</u> : Conceivable, but only in extreme circumstances and/ or has not happened during lifetime of the Project but has happened elsewhere. The possibility of the impact materialising is very low because of design, historic experience, or implementation of adequate mitigation measures	
1	<u>Highly unlikely/None</u> : Expected never to happen.	

Impacts are rated prior to mitigation or enhancement and again after consideration of the proposed mitigation or enhancement measures. The impact is then determined and categorised into one of eight significance categories, as indicated Table 8-2 below. The relationship between consequence, probability and significance ratings is graphically depicted in Figure 8-1.

**Table 8-2: Significance Ratings**

Score	Description	Rating
109 to 147	A very beneficial impact that may be sufficient by itself to justify implementation of the project. The impact may result in permanent positive change	Major (positive) (+)
73 to 108	A beneficial impact which may help to justify the implementation of the project. These impacts would be considered by society as constituting a major and usually a long-term positive change to the (natural and / or social) environment	Moderate (positive) (+)
36 to 72	A positive impact. These impacts will usually result in positive medium to long-term effect on the natural and / or social environment	Minor (positive) (+)
3 to 35	A small positive impact. The impact will result in medium to short term effects on the natural and / or social environment	Negligible (positive) (+)

Score	Description	Rating
-3 to -35	An acceptable negative impact for which mitigation is desirable. The impact by itself is insufficient even in combination with other low impacts to prevent the development being approved. These impacts will result in negative medium to short term effects on the natural and / or social environment	Negligible (negative) (-)
-36 to -72	A minor negative impact requires mitigation. The impact is insufficient by itself to prevent the implementation of the project but which in conjunction with other impacts may prevent its implementation. These impacts will usually result in negative medium to long-term effect on the natural and / or social environment	Minor (negative) (-)
-73 to -108	A moderate negative impact may prevent the implementation of the project. These impacts would be considered as constituting a major and usually a long-term change to the (natural and / or social) environment and result in severe changes.	Moderate (negative) (-)
-109 to -147	A major negative impact may be sufficient by itself to prevent implementation of the project. The impact may result in permanent change. Very often these impacts are immitigable and usually result in very severe effects. The impacts are likely to be irreversible and/or irreplaceable.	Major (negative) (-)

### Significance

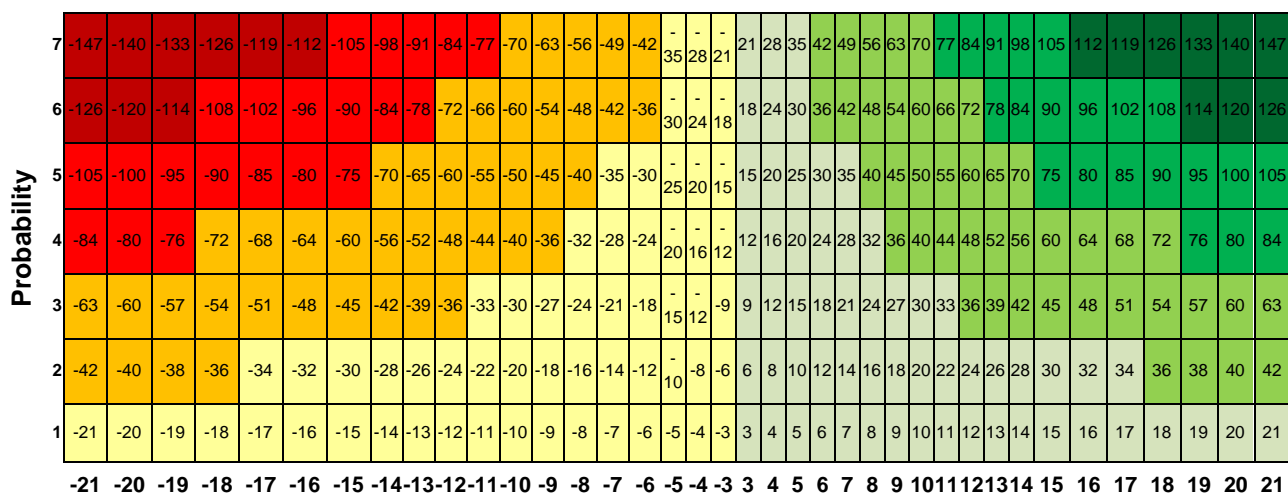


Figure 8-1: Relationship between ratings

A summary of the expected socio-economic impacts during the construction phase is listed in Table 8-3 and discussed in more detail in the following subsections.

## 8.2. Construction Phase

**Table 8-3: Summary of Impacts expected during the Construction Phase**

Impact	Description
Creation of temporary employment opportunities	The Project will contract local skilled and unskilled individuals for short-term opportunities. Those able to secure employment will also enjoy benefits associated with steady income during that period
Opportunities and capabilities within the supply chain	The Project will require highly technical capital goods and services and procure some through contracts lasting several months to several years from the local business.
Impacts associated with project-induced population influx	The Project is likely to give rise to an increase in population influx to the area 'in anticipation of, or response to, economic opportunities associated with the project's development and/ or operation. The influx will likely result in increased demand for resources (water, electricity, housing, public transport, health services etc.), create tension among locals and increase social pathologies
Community health, safety and security	The construction activities will have health and safety risks
Community unrest due to a perceived lack of economic opportunities and unmet expectations	<p>An influx of in-migrant job seekers into the primary study area will significantly increase competition for employment and other opportunities. This has the potential to create tension and unrest.</p> <p>The community also have a lot of expectations derived from previous engagements with the mine that has caused the community to protest</p>

### 8.2.1. Impact Description: Creation of employment opportunities

The rate of unemployment within MCLM is high even though there are mines in the community that are currently operational. Economic activities in the primary study area are generally scarce, and there is a high dependency on all sectors to produce economic opportunities,

though the focus is often on mining. The existing economic and socio-political challenges have resulted in:

- High levels of unemployment, especially amongst the youths;
- Low household income levels and high household poverty;
- High dependency on those currently employed; and High in-migration levels of people from other provinces and elsewhere in Africa in search of economic opportunities within the mining sector.

Overall, there are higher expectations amongst the general population regarding the Project as a source of employment for the local people.

At the time of this report, the number of construction-related opportunities was not known. However, it is assumed that the project will require highly skilled, semi-skilled, and unskilled workers during construction. The construction phase is also short-term, and therefore, any job opportunities associated with this phase of the project would be temporary.

The locals are likely to benefit from unskilled opportunities associated with the project. Where possible, the project will fill these positions with people from the primary study area, followed by those from the secondary and regional study areas.

Indirect and induced employment opportunities are created through the project's supply chain and by increased spending in the economy by those who secure employment with the project. Those who can secure employment opportunities with the project will gain some skills, and work experience, which will increase their employability in other projects of a similar nature in the future.

#### **8.2.1.1. Management Objectives**

- Maximise the number of employment of people living within the study areas;
- Prioritise the youth and women;
- Ensure a transparent and fair recruitment procedure and processes by the Project and its contractors.

#### **8.2.1.2. Management Actions**

- Establish a local recruitment committee to ensure a fair and transparent recruitment process;
- Prioritise employment and training of people living within the primary study area over outsiders, especially for unskilled and semi-skilled positions;
- Local employment targets must include employment of youths and women from historically disadvantaged backgrounds;
- Where possible, the construction workforce must be for the operation of the mine;
- Ensure that the mine's Community Liaison Officer is informed of all project developments to facilitate ongoing and active engagement with stakeholders;
- Comply with minimum wage requirements for unskilled labour;

- Widely advertise all Project employment opportunities in local community newspapers and placed in public places in local languages;
- All employment opportunities must be advertised in predominantly spoken languages within the primary study area;
- Accommodate those that do not have access to android phones or the internet, and widely advertise employment opportunities using community newspapers, notice boards, etc;
- Ensure that no employment takes place at the entrance to the site (to avoid people congregating at the work site). Only formal channels for employment must be used; and
- Implement company grievance procedure to record and resolve complaints and issues/ concerns of project-affected communities.

#### **8.2.1.3. Impact Ratings**

The potential employment impacts and enhancement measures are described and assessed in Table 8-4.

**Table 8-4: Impacts associated with the creation of temporary employment opportunities**

Creation of employment opportunities				
Project phase		Construction		
Dimension	Rating	Motivation	Consequences	Significance
Pre-Mitigation				
Duration	Short term (2)	Equal to the duration of construction activities	Slightly beneficial (8)	Minor - positive (40)
Extent	Sub-regional (4)	Although most unskilled and semi-skilled workers will originate from the MCLM; some semi-skilled and most skilled employees will likely originate from anywhere around the country.		
Intensity	Low - positive (2)	Low skill levels imply that local populations might not be able to take optimal advantage of these opportunities. Also, it is possible that contractors will use their existing workforce, decreasing local employment.		
Likelihood	Likely (5)	Without appropriate mitigation (e.g., local employment policy and monitoring thereof, skills development, etc.), local employment will be limited		
Post-Mitigation				
Duration	Long term (4)	As for pre-mitigation	Moderately beneficial (12)	Minor - positive (60)
Extent	Sub-regional (4)	As for pre-mitigation		
Intensity	Moderately high - positive (4)	Measures will ensure and potentially increase employment in primary and secondary study areas, which will intensify positive change.		
Probability	Likely (5)	Mitigation will maximise the probability, through monitoring, that local employment is maximised and benefits optimised.		

### **8.2.2. Impact Description: Opportunities and capabilities within the supply chain**

During construction, it is anticipated that the Project will require highly technical capital goods and services, and it will procure these through contracts lasting several months. Although most of the mine Project's specific products will need to be sourced nationally and/or internationally, requirements such as civil engineering services, maintenance services for non-technical aspects, security services, buildings and facilities maintenance, general vehicle maintenance and land clearing and management are able to be procured from some businesses within the secondary and regional study areas.

In the primary study area, direct procurement is expected to be limited due to the undeveloped economy and the low capability and capacity of service providers to meet the needs of the Project. While some businesses in the local primary study area may eventually enter the mine's supply chain, in part through participation in Project training programmes, few are expected to do so in the early phases of construction.

Without support, the local suppliers are anticipated to have limited capacity to meet the project's standards of quality and scale. However, where local businesses can take up opportunities to be part of the Project's supply chain, enterprises can expect long-lasting and sustained benefits

#### **8.2.2.1. Management Objectives**

- To enhance the participation of locally based businesses in the Project's supply chain.

#### **8.2.2.2. Management Actions**

- Conduct an audit of local businesses and their capacity to meet Project needs, including those businesses in the study area, and maintain a database of local business information;
- Creation of an SME electronic portal to facilitate communication of contract opportunities and management training materials to SMEs;
- Ensure that the policy or plan sets out guidance on targets for local businesses used by the Project and that these are monitored accordingly;
- Adaptation of Project procurement documents to suit local businesses as far as possible within the standards required of the Project;
- Considerations for unbundling of contracts into small work programs to ensure that small and locally based businesses can benefit.
- Promotion of joint ventures between large and small Contractors to ensure equitable sharing of economic benefits and skills development.



- Partner with relevant organisations where available and appropriate (e.g., government agencies, civil society, and NGOs) to provide access for local businesses to finance and advisory services to develop their capacity to competitively supply to the Project
- Implement a procedure for dissemination of procurement opportunities as early as possible, with clearly defined requirements for the goods or service to manage expectations; and
- Implementation of the grievance procedure..

### 8.2.2.3. Impact Ratings

The potential impacts associated with opportunities and capabilities within the supply chain are described in Table 8-5.

**Table 8-5: Opportunities and Capabilities within Supply Chain**

Opportunities and Capabilities within Supply Chain				
Project Phase		Construction		
Dimension	Rating	Motivation	Consequences	Significance
Pre-Mitigation				
Duration	Long term (4)	Contractors will be required during the construction phase, and some will be required during the life of the Project	Moderately beneficial (10)	Minor - positive (50)
Extent	Sub-regional (4)	Will include some local, but mostly impacts within the local and regional study areas		
Intensity	Low - positive (2)	Will derive from increase in disposable income community development programmes, stimulation of economic sectors, procurement, economic growth, and increased local markets		
Likelihood	Likely (5)	Will primarily depend on proportion of local spending by employees as well as the capacity of local and regional enterprises to provide supply.		
Post-Mitigation				
Duration	Long term (4)	As for pre-mitigation	Highly beneficial (14)	Moderate - positive (84)
Extent	Sub-regional (4)	As for pre-mitigation		
Intensity	Very high - positive (6)	Mitigation will increase and intensity of multiplier effects as it will concentrate impact within		

Opportunities and Capabilities within Supply Chain				
Project Phase		Construction		
Dimension	Rating	Motivation	Consequences	Significance
		the secondary and primary study area		
<b>Probability</b>	Highly probable (6)	Increased local employment and procurement, as well as upskilling of local enterprises, will enhance the likelihood of benefits to the local economy		

### 8.2.3. Impact Description: Impacts associated with project-induced population influx

The project is likely to result in some formal and informal influx mainly based on the perception and rumours about possible employment opportunities of the construction of the TSF. Due to the number of existing and historic mines in the area, one could expect that the ongoing movement of potential jobseekers into the area is a given reality as former mine employees were not necessarily absorbed by other sectors.

The number of employment opportunities is not known yet; however, it is expected that the number of opportunities will be small in relation to the existing unemployment rate.

The stakeholders have mentioned they are concerned that the project will attract an influx of new people in the area that would slightly increase the local population due to the perceived economic opportunities associated with construction job opportunities, i.e., a potential increase in job seekers, entrepreneurs/traders. Even though the influx may not be large, it still puts pressure on the already socio-economically pressured community. Unlike the regulated circumstances surrounding a construction workforce (i.e., a set number of people who enter the area for a certain period), the influx of job seekers is unregulated and often very difficult to control. Impacts associated with population influx can lead to the following:

- Many people who come to the community rent backrooms; however, some will establish their own spaces in informal settlements. As a result, there will be an increased demand for land to be used for informal housing developments and competition for natural resources;
- Increased pressure on existing public infrastructure and services (sanitation, education, health, etc.) which are all already constrained, increasing pressure on the resources of local government, and increasing risks of impacts on health and welfare associated with lack of access to these services;

- Tensions are likely to arise within the community due to unmet expectations of employment and economic development because of competition between community members and in-migrants. These may be exacerbated by the actual or perceived advantages of in-migrants

The informal population influx is difficult to mitigate and cannot be attributed to the project, as it is an existing impact in the area. It is, however, likely to increase in the short term.

#### **8.2.3.1. Management Objectives**

- To manage, minimise and avoid impacts associated with population influx

#### **8.2.3.2. Management Actions**

- Develop an In-Migration Plan that addresses how the Project will seek to minimise Project-induced in-migration as far as possible. Implement mitigation measures to address the adverse environmental and social consequences and maximise the benefits of in-migration. The management plan should be developed together with other industry role players and the government;
- Where possible, construction employees should be locally sourced as they will live with their families;
- Engage with local communities to understand their concerns, raise awareness of risks and opportunities, and identify solutions to issues related to in-migration.

#### **8.2.3.3. Impact Ratings**

The potential impacts associated with population influx are described and assessed in Table 8-6.

**Table 8-6: Impacts associated with population influx**

Impacts Associated with population influx				
Project phases		Construction & Operation		
Dimension	Rating	Motivation	Consequences	Significance
Pre-Mitigation				
Duration	Beyond project life (6)	Expectations could start before construction commences and will likely extend well into the operational phase and decommissioning	Moderately detrimental (-13)	Moderate - negative (-78)
Extent	Project footprint and immediate surrounds (2)	It will mostly affect settlements within the local study area		
Intensity	High - negative (-5)	The influx will likely exacerbate existing negative social conditions in several ways: increased social pathologies, pressure on service, the conflict between locals and non-locals and the establishment of informal settling		
Likelihood	Highly probable (6)	Influx, pressure on services, growth of informal settlements and competition for opportunities are already problems in the municipality		
Post-Mitigation				
Duration	Project Life (5)	Effective mitigation will prevent long-lasting consequences of influx, especially social pathologies	Moderately detrimental (-11)	Minor - negative (-55)
Extent	Project footprint and immediate surrounds (2)	As for pre-mitigation		
Intensity	Moderately high - negative (-4)	Mitigation measures should be effective in reducing the severity of impacts to a limited degree		
Probability	Likely (5)	Mitigation will reduce the likelihood of this impact occurring to the extent predicted		

#### 8.2.4. Impact Description: Community health and safety

The IFC Performance Standard 4 recognizes that project activities, equipment, and related infrastructure can increase community exposure to risks and impacts. Mining is a high-risk industry which can have serious health and safety consequences. Most of the impacts related to this will occur in all project phases.

The health, safety and security impacts include but are not limited to:

- Health Risks
  - Increased noise levels from the movement of vehicles, people, and other equipment;
  - Air pollution and dust caused by construction vehicles and the reclamation of the tailing;
- Safety risks
  - Increased numbers of heavy motor vehicle traffic associated with the project, if not effectively mitigated, will likely pose a safety risk for existing road users and pedestrians in areas adjacent to the access road. This impact may extend to regional or national roads.
  - An increase in the number of heavy-duty vehicles on the local roads is likely to result in the formation of potholes, and should these be left unfixed; they will pose a danger to all road users, including the mine vehicles and other private vehicles

##### 8.2.4.1. Management Objectives

To reduce, manage or avoid project impacts associated with community health and safety

##### 8.2.4.2. Management Actions

- **To mitigate general health**
  - In partnership with government authorities, the Project supports improvements to existing health services to handle the increase in population numbers and changes to the existing health profile of the area. This may include facilities, quality of medical personnel, diagnostic capacity, treatment, etc.
- **To mitigate dust impacts:**
  - Implement mitigation measures proposed in the Air Quality Impact Assessment Study.
- **To mitigate community safety from road traffic:**

- Road safety interventions may need to range beyond their fleets of company vehicles and their workers' commutes. Mitigations should consider the driving, walking, and riding practices of community members in the locality.
- Develop a Traffic Management Plan covering vehicle safety, driver, and passenger behaviour, use of drugs and alcohol, hours of operation, rest periods and accident reporting and investigations.
- Require Project drivers to be trained in defensive driving and provided regular refresher courses.
- Propose road bypasses where there is a significant risk to public safety from road accidents.
- Establish preparedness and response capabilities to deal with any road traffic or other accidents that may occur, including multiple casualty events.
- **To mitigate noise**
  - Implement mitigation measures proposed in the Noise Impact Assessment Study.

#### 8.2.4.3. Impact Ratings

The potential impacts associated with Community Health and Safety are described and assessed in Table 8-7.

**Table 8-7: Impacts associated with community health and safety**

Health and safety impacts				
Project phase		Construction Operation		
Dimension	Rating	Motivation	Consequence	Significance
<b>Pre-Mitigation</b>				
Duration	Beyond project life (6)	It Will continue for the duration of the Project and likely continue during decommissioning	Moderately detrimental (-13)	Moderate - negative (-78)
Extent	Project footprint and immediate surrounds (2)	Will mostly affect the population within the site-specific study areas, some users of local roads, as well as project and contracted employees		
Intensity	High - negative (-5)	Could place the lives of employees and community members at risk, especially those travelling on the initial access road as well as exposure to fires and hazardous materials		

Health and safety impacts				
Project phase		Construction Operation		
Dimension	Rating	Motivation	Consequence	Significance
Likelihood	Highly probable (6)	Some changes in the social environment and the visual character of the landscape will be unavoidable.		
Post-Mitigation				
Duration	Long term (4)	As for pre-mitigation	Moderately detrimental (-10)	Minor - negative (-50)
Extent	Local (3)	Mitigation may reduce the area over which changes are discernible		
Intensity	Moderate - negative (-3)	Impacts will still occur, albeit not to the degree it was initially expected		
Probability	Likely (5)	Appropriate mitigation will reduce the risk of this impact		

### 8.2.5. Impact Description: Community unrest due to a perceived lack of economic opportunities and unmet expectations

As mentioned in Section 7, the community have a history of dissatisfaction with Mintails regarding unfulfilled promises relating to environmental and SLP compliance and unattended community grievances. That has led to protests in the past, with the community advocating for the mine to close. There is an expectation from the community for the mine to address pending issues first before any other operation activities can resume.

From the engagements, some welcome the prospects of reclamation, and there are elevated expectations amongst the local community in terms of employment associated with the Project. However, it is likely that the skilled personnel required for many jobs during the construction and operation of the mine are not available in the local study area and are likely to be sourced from elsewhere in the country. Most youth have acquired certificates; however, most are not aligned with the required skill sets. An influx of in-migrant job seekers into the primary study area will significantly increase competition for employment and other opportunities. It is possible that some of these migrants will have gained relevant skills in mining and construction in other projects within the country and which will be an advantage in seeking work positions with the Project.

#### 8.2.5.1. Management Objectives

- To avoid impacts associated with community unrest due to perceived lack of economic opportunities and unfulfilled promises.
- To prevent protests and unrest associated with a perceived lack of economic opportunities.

#### 8.2.5.2. Management Actions

- Compile and review the grievance register and identify recurring issues and concerns of the communities over the past five years. Subsequently:
  - Separate the issues in terms of the responsible parties – i.e., Mintails and government.
  - Prepare communication materials tailored to address the recurring issues and concerns of all communities as they relate to the mine. The materials should include approved responses to the frequently raised issues and concerns as well as information posters to be plastered in communities around the municipality.
  - Embark on an information sharing campaign to distribute and discuss the issues that are pertaining to the mine and its obligations to the communities and government.
- Broaden stakeholder engagement and consultation efforts beyond community leaders and government – increase the focus on youths' consultation to ease the tension.
- Encourage stakeholders to utilise the grievance procedure to communicate their issues and ensure a timeous response to all lodged complaints and grievances.

#### 8.2.5.3. Impact Ratings

The potential impacts associated with community unrest are described and assessed in Table 8-8.

**Table 8-8: Impacts associated with community unrest due to perceived lack of economic opportunities and unfulfilled promises**

Impacts Associated with Community Unrest Due to Perceived Lack of Economic Opportunities and Unfulfilled Promises				
Project Phase		Construction Operation		
Dimension	Rating	Motivation	Consequences	Significance
<i>Pre-Mitigation</i>				



Duration	Project Life (5)	The impact will commence at the start of the project and becomes most pronounced during the operational phase but continue into decommissioning when infrastructure will be deconstructed	Moderately detrimental (-13)	Moderate - negative (-78)
Extent	Local (3)	Communities surrounding the Project often resort to unrest and protests whenever dissatisfied with the mine.		
Intensity	High - negative (-5)	Unrest and protest often lead to the destruction of property and infrastructure and loss of work hours, and business and reputational risks for the mine.		
Likelihood	Highly probable (6)	Community members have indicated that they will embark on protest actions if the mine does not rectify the negative impacts.		
Post-Mitigation				
Duration	Long-term (4)	Mitigation measures will reduce impact to such a level that those affected will adapt to disruption over time	Moderately detrimental (-11)	Minor - negative (-55)
Extent	Sub-regional (4)	As for pre-mitigation		
Intensity	Moderate - negative (-3)	The application of mitigation measures should reduce the severity of the impact but not avoid the impact.		
Probability	Likely (5)	Mitigation will reduce the likelihood of this impact occurring to the extent predicted		

### 8.3. Operational Phase

A summary of the expected socio-economic impacts during the operation phase is listed in Table 8-9 and discussed in more detail in the following subsections.

**Table 8-9: Summary of Impacts expected during the Operation Phase**

Creation of employment opportunities	These may be an opportunity for long-term and permanent jobs offered through the mining Contractors or directly by the Project Proponent, which will improve to livelihoods of the workforce
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Opportunities and capabilities within the supply chain	Suppliers within the study area who will have been involved in construction will have experience with the Project's procurement requirements and be able to meet its needs during operation.
Transfer of skills and training	<p>The Project will provide skills and training to the newly recruited workforce.</p> <p>The skills and work experience gained on the Project will improve the employability of those engaged in the construction activities and allow them to secure employment elsewhere in the province for related work programs</p>
Multiplier effects on the local municipality, district and provincial economy	The proposed Project could result in several socio-economic benefits through direct and multiplier effects stimulated by capital expenditure on construction and operational activities.
Community development as part of the Social and Labour Plan	The community can benefit from community development through the implementation of the SLP
Community health and safety	The construction activities will have health and safety risks

### 8.3.1. Impact Description: Creation of employment opportunities

During the operation phase, it is anticipated that there will be a continuation of employment opportunities from the construction phase. The employment opportunities will vary from short- and long-term labour in mining, contracting, the plant, engineering, social development, support and safety. It is expected that employees will come from different places, including local, district and provincial levels. Those who can secure employment opportunities with the Project during operations will also benefit from training and skills development opportunities linked to the SLP and on-the-job training experience.

#### 8.3.1.1. Management Objectives

- To enhance employment and skills development of people living within the study areas.

#### 8.3.1.2. Management Actions

- Develop and continuously update (throughout the LoM) an Employment Policy to increase local employment and transfer operational positions from migrant workers to people from within the study areas.
- Ensure the implementation of the Social and labour Plan to support the promotion of education and skills uplift among local communities within the study areas, including the implementation of on-the-job training and scholarship programme.

- Develop and implement a grievance procedure that local communities can utilise reporting their issues and concerns related to the Project.
- Implement enhancement and mitigation measures in Section 8.2.1.2.
- Implementation of the SLP workforce programs.

### 8.3.1.3. Impact Ratings

The potential impacts of the creation of employment, work skills development and experience and enhancement measures are described and assessed in Table 8-10.

**Table 8-10: Creation of employment opportunities**

Creation of employment opportunities				
Project phase		Construction Operation		
Dimension	Rating	Motivation	Consequence	Significance
Pre-Mitigation				
Duration	Project Life (5)	Equal to the duration of the operational activities	Moderately beneficial (13)	Minor - positive (52)
Extent	National (6)	Some positions will be filled by persons living in the primary and secondary study areas; however, most positions will likely be occupied by employee's originating from elsewhere in the region or further.		
Intensity	Low - positive (2)	Limited employment opportunities will be available for un- and semi-skilled individuals		
Likelihood	Probable (4)	A limited number of local people possess the education and skills levels required by the Project		
Post-Mitigation				

Duration	Project Life (5)	As for pre-mitigation		
Extent	Regional (5)	Mitigation will concentrate employment to the secondary study area and increase employment from the primary study area, decreasing the extent	Moderately beneficial (13)	Moderate - positive (78)
Intensity	Moderate - positive (3)	Mitigation will maximise local job creation		
Probability	Highly probable (6)	Mitigation will maximise the probability that local recruitment targets are achieved, and local benefits optimised		

### 8.3.2. Impact Description: Opportunities and capabilities within the supply chain

During operations, the project will require ongoing supply chain services, including spending on specialists, consultants, and mining service providers, amongst others. It is also expected that suppliers within the secondary and regional study areas who will have been involved in construction would have experience with the Project's procurement requirements and be better able to meet its needs during operation. The Project operations are expected to bring increased opportunities and capabilities within the local supply chain, both through direct contracts with the project and indirect procurement opportunities to meet growing local demand for goods and services.

Supply chain opportunities are considered to have an effect of a medium magnitude, given limited numbers of non-technical contracts accessible to local suppliers and increased general demand from the Project. In the primary study area, access to Project training services initiatives is likely to help businesses meet the Project's demand for goods and services.

#### 8.3.2.1. Management Objectives

- To enhance the participation of locally based businesses in the Project's supply chain.
- Ensure the implementation of the SLP to support the promotion of education and skills uplift among local communities within the study areas, including the implementation of on-the-job training.

#### 8.3.2.2. Management Actions

Implement enhancement measures provided in section 8.2.2.2.

#### 8.3.2.3. Impact Ratings

The impact significance is described, assessed and rated in Table 8-11.

**Table 8-11: Opportunities and Capabilities within Supply Chain**

Opportunities and Capabilities within Supply Chain				
Project phase		Construction Operation		
Dimension	Rating	Motivation	Consequence	Significance
Pre-Mitigation				
Duration	Project Life (5)	Contractors will be required during the construction phase, and some will be required during the life of the Project	Moderately beneficial (11)	Minor - positive (44)
Extent	Sub-regional (4)	Will include some local but mostly impacts within the local and regional study areas		
Intensity	Low - positive (2)	Will derive from an increase in disposable income community development programmes, stimulation of economic sectors, procurement, economic growth, and increased local markets		
Likelihood	Probable (4)	It will primarily depend on the proportion of local spending by employees as well as the capacity of local and regional enterprises to provide supply.		
Post-Mitigation				
Duration	Project Life (5)	As for pre-mitigation	Highly beneficial (15)	Moderate - positive (90)
Extent	Sub-regional (4)	As for pre-mitigation		
Intensity	Very high - positive (6)	Mitigation will increase, and intensity of multiplier effects as it will concentrate impact within the secondary and primary study area		
Probability	Highly probable (6)	Increased local employment and procurement, as well as upskilling of local enterprises, will enhance the likelihood of benefits to the local economy		

### 8.3.3. Impact Description: Transfer of skills and training

Apart from a continuation of employment opportunities created, the mine is also legally obligated to commit to the training its labour force as per skills development legislation for the industry. The mine makes provision for a skills development plan for its local workforce through the programmes required by legislation that regulates SLPs of mines. Required training includes functional literacy and numeracy programmes, career progression plans, up-skilling for hard-to-fill vacancies and management positions, bursary and internships and portable skills training. As such, those employed are continuously obtaining skills and experience on the job and increasing their employability for the future.

#### 8.3.3.1. Management Objectives

- To expand on its skills training initiatives through the continuation of its SLP commitments over the Life of Mine (LoM)

#### 8.3.3.2. Management Actions

- Prioritise training and capacity development for the least qualified workforce members. The training initiatives should consider the levels of education of the targeted workforce and the areas of interest.
- Conduct a Workforce Skills Audit to better understand the current skills of the individuals and experience to identify gaps and propose programs to fill those gaps
- Using the information sourced from the audit, review, update and implement the Multi-Skilled Workforce program focusing on ensuring that the workforce members receive the training required. As part of the program:
  - Ensure that time is set aside for each employee participating in the program to receive required on-the-job training;
  - Set achievable monitoring targets for each employee participating in the program to enable HR and team supervisors to track progress; and
  - All workers who participate and complete the program must receive certificates of completion.
- Appoint a Life-Coach/ Career Development Coach or mentor to assist the workforce in selecting education programs of their own interest.
- Introduce an in-house Mentorship Program. The program will target the workforce with existing qualifications they are not using as part of their current job. This program must work hand-in-hand and in parallel with the Multi-Skilled Workforce program.
- Expand the bursaries to include non-mining related bursaries;
- Ensure provision of employment to at least 80% of the people who receive bursaries and or training through the mine;

- Encourage the workforce to use the Workforce Grievance Procedure should they be dissatisfied with the implementation of the program.

### 8.3.3.3. Impact Ratings

The impact significance is described, assessed, and rated in Table 8-12.

**Table 8-12: Transfer of skills and training**

Transfer of skills and training				
Project phase		Operation		
Dimension	Rating	Motivation	Consequence	Significance
Pre-Mitigation				
Duration	Project Life (5)	Skills training will continue as per SLP regulations as long as the mine is operational.	Moderately beneficial (10)	Minor - positive (70)
Extent	Local (3)	Skills training programmes are also offered to local communities in addition to the workforce - albeit on a more limited scale.		
Intensity	Low - positive (2)	Skills training programmes are largely aimed at the current workforce with little benefit to the local community.		
Likelihood	Certain (7)	Skills training programmes are already taking place and a legal requirement of the SLP.		
Post-Mitigation				
Duration	Project Life (5)	As for pre-mitigation	Moderately beneficial (11)	Moderate - positive (77)
Extent	Local (3)	As for pre-mitigation		
Intensity	Moderate - positive (3)	Mitigation measures could aid in expanding the skills training programmes to more of the local community, having further reaching effects.		
Probability	Certain (7)	As for pre-mitigation		



### 8.3.4. Impact Description: Multiplier effects on the local municipality, district and provincial economy

The proposed Project could result in several socio-economic benefits through direct and multiplier effects stimulated by capital expenditure on construction and operational activities. Industrial construction activities increase the demand for a wide variety of goods and services and as a result, stimulate and / or sustain growth within the regional manufacturing Limpopo Province. This economic environment has the potential to generate opportunities for small, medium, and micro enterprises (SMMEs), provided they are formalised and able to meet the procurement requirements of the proposed mine. The Project and its contractors are committed to making maximum use of local SMMEs, and BBBEE companies (as a requirement of the SLP) but may need to procure from businesses elsewhere in the province to meet highly technical needs.

Finally, the capital spent on Human Resource Development (HRD) for mine employees and community development initiatives could, if implemented effectively and sustainably, represent economic progress within the Project area, thereby also creating conditions conducive to economic growth.

#### 8.3.4.1. Management Objectives

- To enhance the Project's economic benefits as it relates to upliftment and prioritisation of local people through the provision of employment and procurement opportunities.

#### 8.3.4.2. Management Actions

- Implement enhancement measures linked to employment creation and opportunities associated with the supply chain.
- Implement the SLP-related interventions.
- Compliance with SLP commitments to maximum the use of local SMMEs and BBBEE companies.
- Implement the grievance procedure

#### 8.3.4.3. Impact Ratings

The potential impacts and enhancement measures related to multiplier effects on the local and regional economy are described in Table 8-13.

**Table 8-13: Multiplier effects on the local and regional economy**

Multiplier effects on the local and regional economy				
Project phase		Construction Operation		
Dimension	Rating	Motivation	Consequence	Significance

Pre-Mitigation				
Duration	Project Life (5)	Will peak during the construction phase and continue throughout the remainder of the life of the Project	Moderately beneficial (12)	Minor - positive (60)
Extent	Regional (5)	Will include some local, but mainly impacts will be within the local and regional study areas		
Intensity	Low - positive (2)	Will derive from an increase in disposable income, community development programmes, stimulation of economic sectors, procurement, economic growth, and increased local markets		
Likelihood	Likely (5)	It will primarily depend on the proportion of local spending by employees and the capacity of local and regional enterprises to supply.		
Post-Mitigation				
Duration	Project Life (5)	As for pre-mitigation	Moderately beneficial (13)	Moderate - positive (78)
Extent	Regional (5)	Enterprise capacity building, together with monitoring, could concentrate procurement from the regional study area but also increase the involvement of business within the local study area		
Intensity	Moderate - positive (3)	Mitigation will likely increase and intensity of multiplier effects as it will concentrate impact within the secondary and primary study area		
Probability	Highly probable (6)	Increased local employment and procurement, as well as upskilling of local enterprises, will enhance the likelihood of benefits to the local economy		

### 8.3.5. Impact Description: Community development as part of the Social and Labour Plan

The Project will contribute to community development and social upliftment through the implementation of its SLP. If implemented successfully, the SLP has the potential to facilitate and catalyse socio-economic development within the study area. These initiatives, especially

if implemented in consultation and collaboration with other development stakeholders (such as local government and non-governmental development organisations), can contribute to socio-economic development, sustainable jobs, and income stability of households within local communities. Contributing to community development and social upliftment is central to establishing a productive relationship between the Project and its surrounding communities and, therefore, establishing and maintaining a social licence to operate. It is, however, worth noting that the current SLP projects for the Project are focused on the broader area as the beneficiaries.

#### **8.3.5.1. Management Objectives**

- To enhance SLP-related community development initiatives.

#### **8.3.5.2. Management Actions**

- Ensure an independent process of developing the SLP from the local government;
- Engagement with key stakeholders such as government and community leaders, to identify:
  - The beneficiary communities of the economic and livelihood development initiatives.
  - The types of initiatives that the mine should investigate and consider implementing.
  - Propose their roles and responsibilities in the implementation of the initiatives.
  - Sign-off on the agreed terms and conditions discussed at the meeting.
  - Establishing an external monitoring programme to monitor and evaluate community development initiatives
- Subsequently, Mogale Gold must consult with the representatives of each community to:
  - Present the outcomes of the discussions with the key stakeholders.
  - Present the agreed terms and conditions with key stakeholders.
  - Develop an implementation plan for each of the community initiatives selected
  - Present the plan to the community members.
  - Collate the names of people and their interests, and
  - Encourage community members to form cooperatives or groups in case of similar interest in livelihoods within communities.

### 8.3.5.3. Impact Ratings

The potential impacts and enhancement measures related to social development are described in Table 8-14.

**Table 8-14: Social Development as part of Social and Labour Plan**

Social Development as part of Social and Labour Plan				
Project phase		Construction Operation		
Dimension	Rating	Motivation	Consequence	Significance
Pre-Mitigation				
Duration	Beyond project life (6)	SLP will be implemented during the construction and operational phases. If sustainably managed, benefits could extend beyond the life of the mine	Highly beneficial (14)	Minor - positive (70)
Extent	Local (3)	It will benefit local communities		
Intensity x type of impact	High - positive (5)	The community currently suffers from high levels of unemployment and shortages of services/ infrastructure, and the development will be beneficial to them		
Likelihood	Likely (5)	Without adequate stakeholder involvement, development initiatives are unlikely to be sustainable		
Post-Mitigation				
Duration	Permanent (7)	As for pre-mitigation	Highly beneficial (16)	Moderate - positive (96)
Extent	Local (3)	As for pre-mitigation		
Intensity x type of impact	Very high - positive (6)	Recommended measures will enhance stakeholder buy-in and have a positive impact on beneficiaries		
Probability	Highly probable (6)	Recommended measures will improve the likelihood of projects' sustainability		

### 8.3.6. Impact Description: Community health and safety

The IFC Performance Standard 4 recognizes that project activities, equipment, and its related infrastructure can increase community exposure to risks and impacts. Mining is a high-risk industry, which can have serious health and safety consequences. Most of the impacts related to this will occur in all project phases.

The health, safety and security impacts include but are not limited to:

- Health Risks
  - Increased noise levels from the movement of vehicles, people, and other equipment;
  - Air pollution and dust caused by construction vehicles and the reclamation of the tailing can lead to respiratory illnesses;
- Safety risks
  - Increased numbers of heavy motor vehicle traffic associated with the project, if not effectively mitigated, will likely pose a safety risk for existing road users and pedestrians, and animals in the areas adjacent to the access road. This impact may extend to regional or national roads.
  - An increase in the number of heavy-duty vehicles on the local roads is likely to result in the formation of potholes, and should these be left unfixed; it will pose a danger to all road users, including mine vehicles and other private vehicles.
  - The construction of TSFs is often associated with potential pipeline failures and the TSF overtopping or failing if left unmitigated. These impacts could impact the water quality of the communities along the pipelines.
  - Illegal mining in the area causes a threat to the environment and poses safety risks to residents due to illegal miners being involved in criminal activities and causing damage to mining-related infrastructure. The community has raised concerns about illegal mining, and it is important for that to be monitored.

#### 8.3.6.1. Management Objectives

- Refer to section 8.2.4.1.

#### 8.3.6.2. Management Actions

- Refer to section 8.2.4.2.
- Implement mitigation measures of the respective specialist studies (underground and surface water, noise, visual etc.
- Ensure safety controls and measures are implemented to prevent illegal miners from accessing the TSF site.

### 8.3.6.3. Impact Ratings

The potential impacts associated with Community Health and Safety are described and assessed in Table 8-15.

**Table 8-15: Impacts associated with community health and safety**

Health and safety impacts				
Project phase		Construction Operation		
Dimension	Rating	Motivation	Consequence	Significance
Pre-Mitigation				
Duration	Beyond project life (6)	It Will continue for the duration of the Project and likely continue during decommissioning	Moderately detrimental (-13)	Moderate - negative (-78)
Extent	Project footprint and immediate surrounds (2)	Will mostly affect the population within the site-specific study areas, some users of local roads, as well as project and contracted employees		
Intensity	High - negative (-5)	Could place the lives of employees and community members at risk, especially those travelling on the initial access road as well as exposure to fires and hazardous materials		
Likelihood	Highly probable (6)	Some changes in the social environment and the visual character of the landscape will be unavoidable.		
Post-Mitigation				
Duration	Long term (4)	As for pre-mitigation	Moderately detrimental (-10)	Minor - negative (-50)
Extent	Local (3)	Mitigation may reduce the area over which changes are discernible		
Intensity	Moderate - negative (-3)	Impacts will still occur, albeit not to the degree it was initially expected		
Probability	Likely (5)	Appropriate mitigation will reduce the risk of this impact		

## 8.4. Decommissioning Phase

This section describes and assesses the potential impact associated with the mine's decommissioning, closure, and rehabilitation. The impacts are broadly discussed as it is still too early to fully describe and predict the decommissioning impact at present.

A summary of the expected socio-economic impacts during the decommissioning phase is listed in Table 8-16 and discussed in more detail in the following subsections.

**Table 8-16: Summary of Impacts expected during the decommissioning phase**

Impact	Description
Retrenchment and loss of employment	Decommissioning will involve large-scale downscaling and retrenchment of the workforce over a few years. The downscaling and retrenchment will mean that many people previously directly or indirectly employed will lose their livelihood. Employees of businesses dependent on the mine as they form part of the mine's supply chain delivering goods and services may also lose their jobs
Economic boom-bust	When the operation closes, the loss of jobs and decreased spending in the economy often cause a recession in economic activity
Decrease on local economic development	When the project closes, it is expected that Mogale GoldSLP's commitment will also decrease.

### 8.4.1. Impact Description: Economic boom-bust

The boom-and-bust economic cycle is a key characteristic of capitalist economies and is sometimes synonymous with the business cycle. During the boom, the economy grows, jobs are plentiful, and the market brings high returns to investors. In the subsequent bust, the economy shrinks, people lose their jobs, and investors lose money. Mine closure involves large-scale downscaling and retrenchment of the workforce over several years or months and a reduction in the procurement of goods and services. This usually results in:

- Reduced cash flow as the workforce is being retrenched and subsequently loss of induced jobs created by the decreased spending in the economy.
- Reduction in spending within the local economy due to a loss of economic opportunities associated with the Mine's operational activities.
- The project will no longer be contributing to economic development and diversification.
- The loss of indirect and induced employment due to the termination of procurement contracts associated with operations.



- Reduction in the rates and taxes paid to the municipality for utilities resulting in a decreased spending in community infrastructure and services development, whilst the pressure on these increases.
- Loss of economic development funds through the SLP.
- The increased unemployment rate within the study area.
- Increased dependencies on the government social grant system due to job losses.
- Reduction in social capital due to the out-migration of in-migrant labour, returnees, camp followers, etc., as people move to other areas in search of economic opportunities.
- Increased price sensitivity, especially among the vulnerable households within the study area, due to decreased economic activity, shrinkage of the population and oversupply of labour in the area.

If no alternative livelihood options are presented to the workforce and households within the study area, most of the mining towns become ghost towns with a limited population and economic opportunities.

#### **8.4.1.1. Management Objectives**

- To minimise and manage the economic fall-out associated with the closure of the mine.

#### **8.4.1.2. Management Actions**

- Develop and implement an integrated Mine Closure Plan.
- Develop an exit strategy for any social projects that were implemented during the operational phase in advance (at least two years) before the closure of the project. Follow a clear communication strategy to inform the local community of arrangements made related to social spending and project closure. Stakeholder engagement and communication should also be in advance prior to closure.
- Proactively assess and manage the social and economic impacts on individuals, regions, and economies where retrenchment and/or closure of the Project are certain.
- Develop mechanisms to assist employees prior to retrenchment in the transition phase. This includes offering portable skilled development programmes during the operational phase, providing assistance in assessing available and suitable jobs with other local mines or companies, provide positions during the maintenance and rehabilitation phase.
- Include non-core-related local supply links during the operational phase to facilitate easier transitioning from local suppliers to other industries.

#### 8.4.1.3. Impact Ratings

The potential impacts associated with an economic boom-bust are described and assessed in Table 8-17.

**Table 8-17: Impacts associated with boom-bust after construction and operation**

Economic Boom-Bust after the Construction and Operation				
Project phase		Decommissioning		
Dimension	Rating	Motivation	Consequence	Significance
Pre-Mitigation				
Duration	Long term (4)	Effects of retrenchments/ decommissioning will be long-lasting on employees, local businesses, and government	Highly detrimental (-15)	Moderate - negative (-90)
Extent	Regional (5)	Will most severely affect employees and service providers who were involved in the Project		
Intensity	Very high - negative (-6)	Loss of employment will be detrimental to all personnel that will be retrenched, and in some cases those who lose their jobs may be the breadwinners, and the loss of jobs will affect their households.		
Likelihood	Highly probable (6)	The Project will inevitably come to an end		
Post-Mitigation				
Duration	Long term (4)	Effects of retrenchments/ decommissioning will be long-lasting on employees, local businesses, and government	Moderately detrimental (-12)	Minor - negative (-72)
Extent	Regional (5)	Will most severely affect employees and service providers from the primary study area		
Intensity	Moderate - negative (-3)	Mitigation will reduce the impact of retrenchment		
Probability	Highly probable (6)	Mitigation will reduce the severity of impact on retrenched workers		

## 8.5. Cumulative Impacts

Cumulative impacts are those impacts that result from the incremental impact, on areas or resources used or directly impacted by the project, from other existing, planned, or defined developments (including third-party developments) at the time that the risks and impacts identification process is conducted (IFC PS 1, 2012). Potential cumulative impacts associated with the Project and the potential of more mines being established in the study area are outlined in Table 8-18.

**Table 8-18: Cumulative Impacts**

Cumulative Impacts	Mitigation Measures
Economic dependency on surrounding mines will negatively impact local, regional, and national economies with decommissioning and mine closure.	Collaborate with government, agencies, and civil society to identify alternative economic activities in the study area.
<p>The presence of mining activities in the study area is likely to result in the influx of business and job seekers attracted by the economic activities.</p> <p>The increased in-migration of people may result in:</p> <p>Housing backlog and / or growth of informal settlements.</p> <p>Increased social capital associated with an increase in the number of highly educated and skilled people searching for economic opportunities associated with the mines.</p> <p>Increased population, demand for goods and services, and constraints on supply because of pressure on resources will all contribute to inflation in local prices and increased economic vulnerability of local people, those who are already vulnerable.</p> <p>Increased anti-social behaviours will adversely affect the lives of the local population.</p>	Develop and implement an In-migration Plan in collaboration with government, civil society, and other active mines in the study area.
It is anticipated that there will be a potential increase in noise and dust generation from other mining operators in the area.	Establish new or support existing mine forums in partnership with government and local communities to address cumulative impacts associated with communities.

## 8.6. Unplanned and Low-Risk Events

Table 8-19 summarises some of the potential unplanned and minimal risk events associated with the Project.

**Table 8-19: Unplanned events and associated mitigation measured**

Unplanned Risk	Mitigation Measures
<ul style="list-style-type: none"> <li>Potential for accidental spillage of hazardous materials such as fuel (heavy fuel oil or diesel), lubricants, sewerage etc., along transport routes or at proposed infrastructure.</li> <li>Improper management and disposal of hazardous materials during construction, operation and closure of the mine could result in water resource contamination.</li> <li>Land-disturbing activities that may result in increased dust emissions.</li> <li>Project-related traffic may be the source of dust emissions and combustion emissions, leading to higher levels of air pollution.</li> </ul>	<p>Develop and implement the following industry standard procedures and protocols:</p> <ul style="list-style-type: none"> <li>Spill Prevention, Control and Containment Plan</li> <li>Waste Management Plan</li> <li>Emergency Preparedness and Response Plan</li> <li>Traffic management plan</li> </ul>
<ul style="list-style-type: none"> <li>Increased antisocial behaviours associated with the presence of mine followers such as prostitution, illegal gambling, illegal shebeens, drug uses, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Collaborate with the relevant government offices and partners to manage the increase in antisocial behaviours.</li> </ul>

## 9. Environmental Management Plan

**Table 9-1: Environmental Management Plan**

Potential Impacts	Phase	Aspects Affected	Mitigation Measure	Mitigation type	Monitoring	Responsible Party
Creation of temporary employment opportunities	Operation	Local community	<ul style="list-style-type: none"> <li>Establish a local recruitment committee to ensure a fair and transparent recruitment process;</li> <li>Prioritise employment and training of people living within the primary study area over outsiders especially for unskilled and semi-skilled positions;</li> <li>Local employment targets must include employment of youths and women from historically disadvantaged backgrounds;</li> <li>Where possible, the construction workforce must be for the operation of the mine;</li> <li>Ensure that the mine's Community Liaison Officer is informed of all project developments to facilitate ongoing and active engagement with stakeholders;</li> <li>Comply with minimum wage requirements for unskilled labour;</li> <li>Widely advertise all Project employment opportunities in local community newspapers and placed in public places in local languages;</li> <li>All employment opportunities must be advertised in predominantly spoken languages within the primary study area;</li> <li>Accommodate those that do not have access to android phones or the internet, widely advertise employment opportunities using community newspapers, notice boards, etc;</li> <li>Ensure that no employment take place at the entrance to the site (to avoid people congregating at the work site). Only formal channels for employment must be used; and</li> <li>Implement company grievance procedure to record and resolve complaints and issues/ concerns of project-affected communities.</li> </ul>	Control through implementation of sustainable measures to enhance positive impacts.	Quarterly	Mine management and Human resources

Potential Impacts	Phase	Aspects Affected	Mitigation Measure	Mitigation type	Monitoring	Responsible Party
Opportunities and capabilities within the supply chain	Operation	Local community	<ul style="list-style-type: none"> <li>Conduct an audit of local businesses and their capacity to meet Project needs, including those businesses in the study area, and maintain a database of local business information;</li> <li>Creation of an SME electronic portal to facilitate communication of contract opportunities and management training materials to SMEs;</li> <li>Ensure that the policy or plan sets out guidance on targets for local businesses used by the Project and that these are monitored accordingly;</li> <li>Adaptation of Project procurement documents to suit local businesses as far as possible within the standards required of the Project;</li> <li>Provision of incentives for Project contractors to purchase locally and partner with local businesses, including tender requirements regarding local procurement;</li> <li>Considerations for unbundling of contracts into small work programs to ensure that small and locally based businesses can benefit.</li> <li>Promotion of joint ventures between large and small Contractors to ensure equitable sharing of economic benefits and skills development;</li> <li>Partner with relevant organisations where available and appropriate (e.g., government agencies, civil society, and NGOs) to provide access for local businesses to finance and advisory services to develop their capacity to competitively supply to the Project</li> <li>Implement procedure for dissemination of procurement opportunities as early as possible, with clearly defined requirements for the goods or service to manage expectations; and</li> <li>Implementation of the grievance procedure.</li> </ul>	Control through implementation of sustainable measures to enhance positive impacts.	Quarterly	Mine management and Human resources

Potential Impacts	Phase	Aspects Affected	Mitigation Measure	Mitigation type	Monitoring	Responsible Party
Impacts associated with population influx	Construction and operation	Local community	<ul style="list-style-type: none"> <li>Develop an In-Migration Plan that addresses how the Project will seek to minimise Project-induced in-migration as far as possible. Implement mitigation measures to address the adverse environmental and social consequences and maximise the benefits of in-migration. The management plan should be developed together with other industry role players and the government;</li> <li>Where possible, construction employees should be locally sourced as they will live with their families;</li> <li>Engage with local communities to understand their concerns, raise awareness of risks and opportunities, and identify solutions to issues related to in-migration.</li> </ul>	Control or remedy through management plans for these components.	Annually	Mine management
Community health, safety and security	Construction and operation	Local community and workforce	<p><b>To mitigate general health</b></p> <ul style="list-style-type: none"> <li>In partnership with government authorities, the Project supports improvements to existing health services to handle the increase in population numbers and changes to the existing health profile of the area. This may include facilities, quality of medical personnel, diagnostic capacity, treatment, etc.</li> </ul> <p><b>To mitigate dust impacts:</b></p> <ul style="list-style-type: none"> <li>Implement mitigation measures proposed in the Air Quality Impact Assessment Study.</li> </ul> <p><b>To mitigate community safety from road traffic:</b></p> <p>Road safety interventions may need to range beyond their fleets of company vehicles and their workers' commutes. Mogale Gold should consider the driving, walking, and riding practices of community members in the locality.</p> <p>Develop a Traffic Management Plan covering vehicle safety, driver, and passenger behaviour, use of drugs and alcohol, hours of operation, rest periods and accident reporting and investigations.</p> <p>Require Project drivers to be trained in defensive driving and provided regular refresher courses.</p> <p>Propose road bypasses where there is a significant risk to public safety from road accidents.</p> <p>Establish preparedness and response capabilities to deal with any road traffic or other accidents that may occur, including multiple casualty events.</p> <p><b>To mitigate noise</b></p> <p>Implement mitigation measures proposed in the Noise Impact Assessment Study.</p>	Control through implementation of sustainable measures to enhance positive impacts.	Monthly	Mine management, and health and safety department



Potential Impacts	Phase	Aspects Affected	Mitigation Measure	Mitigation type	Monitoring	Responsible Party
Community unrest due to a perceived lack of economic opportunities and unmet expectations	Construction and operation	Local community	<p>Review the grievance register and identify recurring issues and concerns of the communities over the past 5 years. Subsequently:</p> <ul style="list-style-type: none"> <li>• Separate the issues in terms of the responsible parties – i.e., Mogale Gold and government.</li> <li>• Prepare communication materials tailored to address the recurring issues and concerns of all communities as they relate to the mine. The materials should include approved responses to the frequently raised issues and concerns as well as information posters to be plastered in communities around the municipality.</li> <li>• Embark on an information sharing campaign to distribute and discuss the issues that are pertaining to the mine and its obligations to the communities and government.</li> <li>• Set-up key performance indicators to track the effectiveness of the information sharing campaign.</li> <li>• Broaden stakeholder engagement and consultation efforts beyond community leaders and government – increase the focus on youths' consultation to ease the tension.</li> <li>• Encourage stakeholders to utilise the grievance procedure to communicate their issues and ensure a timely response to all lodged complaints and grievances.</li> </ul>	Stakeholder engagement plan needs to be drafted and this factor needs to be taken into consideration.	Bi-annually	Mine management and Human resources

Potential Impacts	Phase	Aspects Affected	Mitigation Measure	Mitigation type	Monitoring	Responsible Party
Creation of employment opportunities	Operation	Local community	<ul style="list-style-type: none"> <li>Establish a local recruitment committee to ensure a fair and transparent recruitment process;</li> <li>Prioritise employment and training of people living within the primary study area over outsiders, especially for unskilled and semi-skilled positions;</li> <li>Local employment targets must include employment of youths and women from historically disadvantaged backgrounds;</li> <li>Where possible, the construction workforce must be for the operation of the mine;</li> <li>Ensure that the mine's Community Liaison Officer is informed of all project developments to facilitate ongoing and active engagement with stakeholders;</li> <li>Comply with minimum wage requirements for unskilled labour;</li> <li>Widely advertise all Project employment opportunities in local community newspapers and placed in public places in local languages;</li> <li>All employment opportunities must be advertised in predominantly spoken languages within the primary study area;</li> <li>Accommodate those that do not have access to android phones or the internet, and widely advertise employment opportunities using community newspapers, notice boards, etc;</li> <li>Ensure that no employment takes place at the entrance to the site (to avoid people congregating at the work site). Only formal channels for employment must be used; and</li> <li>Implement company grievance procedure to record and resolve complaints and issues/ concerns of project-affected communities.</li> <li></li> </ul>	Control through implementation of sustainable measures to enhance positive impacts.	Quarterly	Mine management and Human resources

Potential Impacts	Phase	Aspects Affected	Mitigation Measure	Mitigation type	Monitoring	Responsible Party
Opportunities and capabilities within the supply chain	Operation	Local community	<ul style="list-style-type: none"> <li>Conduct an audit of local businesses and their capacity to meet Project needs, including those businesses in the study area, and maintain a database of local business information;</li> <li>Creation of an SME electronic portal to facilitate communication of contract opportunities and management training materials to SMEs;</li> <li>Ensure that the policy or plan sets out guidance on targets for local businesses used by the Project and that these are monitored accordingly;</li> <li>Adaptation of Project procurement documents to suit local businesses as far as possible within the standards required of the Project;</li> <li>Considerations for unbundling of contracts into small work programs to ensure that small and locally based businesses can benefit.</li> <li>Promotion of joint ventures between large and small Contractors to ensure equitable sharing of economic benefits and skills development.</li> <li>Partner with relevant organisations where available and appropriate (e.g., government agencies, civil society, and NGOs) to provide access for local businesses to finance and advisory services to develop their capacity to competitively supply to the Project</li> <li>Implement a procedure for dissemination of procurement opportunities as early as possible, with clearly defined requirements for the goods or service to manage expectations; and</li> <li>Implementation of the grievance procedure..</li> </ul>	Control through implementation of sustainable measures to enhance positive impacts.	Quarterly	Mine management and Human resources

Potential Impacts	Phase	Aspects Affected	Mitigation Measure	Mitigation type	Monitoring	Responsible Party
Transfer of skills and training	Operation	Workforce	<ul style="list-style-type: none"> <li>Prioritise training and capacity development for the least qualified workforce members. The training initiatives should consider the levels of education of the targeted workforce and the areas of interest.</li> <li>Conduct a Workforce Skills Audit to better understand the current skills of the individuals and experience to identify gaps and propose programs to fill those gaps</li> <li>Using the information sourced from the audit, review, update and implement the Multi-Skilled Workforce program focusing on ensuring that the workforce members receive the training required. As part of the program:</li> <li>Ensure that time is set aside for each employee participating in the program to receive required on-the-job training;</li> <li>Set achievable monitoring targets for each employee participating in the program to enable HR and team supervisors to track progress; and</li> <li>All workers who participate and complete the program must receive certificates of completion.</li> <li>Appoint a Life-Coach/ Career Development Coach or mentor to assist and guide the workforce in their selection of education programs of their own interest.</li> <li>Introduce an in-house Mentorship Program. The program will target the workforce who have existing qualifications which they are not using as part of their current job. This program must work-hand-in-hand and in parallel with the Multi-Skilled Workforce program.</li> <li>Expand the bursaries to include non-mining related bursaries;</li> <li>Ensure provision of employment to at least 80% of the people who receive bursaries and or training through the mine;</li> <li>Encourage the workforce to use the Workforce Grievance Procedure should they be dissatisfied with the implementation of the program.</li> </ul>	Control through implementation of sustainable measures to enhance positive impacts.	Quarterly	Human resources and development
Multiplier effects on the local municipality, district and provincial economy	Operation	Local, regional, and national population	<ul style="list-style-type: none"> <li>Implement enhancement measures linked to employment creation and opportunities associated with the supply chain.</li> <li>Implement the SLP related interventions.</li> <li>Compliance with SLP commitments to make maximum use of local SMMEs and BBBEE companies.</li> <li>Implement the grievance procedure</li> </ul>	Control through implementation of sustainable measures to enhance positive impacts.	Annually	Mine management

Potential Impacts	Phase	Aspects Affected	Mitigation Measure	Mitigation type	Monitoring	Responsible Party
Community development as part of the Social and Labour Plan	Construction and operation	Local community	<ul style="list-style-type: none"> <li>• Ensure an independent process of developing the SLP from the local government;</li> <li>• Engagement with key stakeholders' such as government and community leaders to identify:</li> <li>• The beneficiary communities of the economic and livelihood development initiatives.</li> <li>• The types of initiatives that the mine should investigate and consider implementing.</li> <li>• Propose their roles and responsibilities in the implementation of the initiatives.</li> <li>• Sign-off on the agreed terms and conditions discussed at the meeting.</li> <li>• Establishing an external monitoring programme to monitor and evaluate community development initiatives</li> <li>• Subsequently, Mogale Gold must consult with the representatives of each community to:</li> <li>• Present the outcomes of the discussions with the key stakeholders.</li> <li>• Present the agreed terms and conditions with key stakeholders.</li> <li>• Develop an implementation plan for each of the community initiatives selected</li> <li>• Present the plan to the community members.</li> <li>• Collate the names of people and their interests, and</li> <li>• Encourage community members to form cooperatives or groups in case of similar interest in livelihoods within communities.</li> </ul>	Control through implementation of sustainable measures to enhance positive impacts.	Quarterly	Mine management
Community health and safety	Construction and operation	Local community and workforce	<p>Refer to section 8.2.4.2.</p> <ul style="list-style-type: none"> <li>• Implement mitigation measures of the respective specialist studies (underground and surface water, noise, visual etc.</li> <li>• Ensure safety controls and measures are implemented to prevent illegal miners from accessing the TSF site.</li> </ul>	Control through implementation of sustainable measures to enhance positive impacts.	Monthly	Mine management, and health and safety department

Potential Impacts	Phase	Aspects Affected	Mitigation Measure	Mitigation type	Monitoring	Responsible Party
Economic boom-bust	Decommissioning	Local community and workforce	<ul style="list-style-type: none"> <li>Develop and implement an integrated Mine Closure Plan.</li> <li>Develop an exit strategy for any social projects that were implemented during the operational phase in advance (at least two years) before the closure of the project. Follow a clear communication strategy to inform the local community of arrangements made related to social spending and project closure. Stakeholder engagement and communication should also be in advance prior to closure.</li> <li>Proactively assess and manage the social and economic impacts on individuals, regions, and economies where retrenchment and/or closure of the Project are certain.</li> <li>Develop mechanisms to assist employees prior to retrenchment in the transition phase. This includes offering portable skilled development programmes during the operational phase, providing assistance in assessing available and suitable jobs with other local mines or companies, provide positions during the maintenance and rehabilitation phase.</li> <li>Include non-core-related local supply links during the operational phase to facilitate easier transitioning from local suppliers to other industries.</li> </ul>	<p>Control through implementation of sustainable measures to enhance positive impacts.</p> <p>Social facilitation plan will be drafted and mitigation measures will be used from this plan.</p>	Annually	Mine management

## 10. Monitoring Programme

The key social aspects which form the monitoring programme are:

- Local employment targets;
- Local procurement targets;
- Community health, safety, and security;
- Environmental rehabilitation;
- Water quality;
- Grievance registration; and
- SLP targets.

**Table 10-1: Monitoring Indicators**

Monitoring Element	Comment	Frequency	Responsible Departments
Local employment targets	Review against set local employment targets	Quarterly	Human Resources Community Development
Local procurement targets	Review the numbers of local businesses engaged in programs, either individuals or through joint ventures	Quarterly	Human Resources Community Development
Community health, safety, and security;	On-going identification, management, and monitoring of H&S risks	Daily	Health and Safety Community Development
Water quality	Implement standard operating protocols Track and monitor the number of grievances registered on the matter	Quarterly Weekly	Environmental Stakeholder Engagement
SLP implementation	Conduct annual audits against set targets for implementation	Annually	Stakeholder Engagement
Grievance registration	Track and monitor the number of grievances registered on the matter	Daily/ weekly	Community Development

## 11. Stakeholder Engagement Comments Received

The consultation process affords Interested and Affected Parties (I&APs) opportunities to engage in the EIA process. The objectives of the Stakeholder Engagement Process (SEP) include the following:

- To ensure that I&APs are informed about the Project;
- To provide I&APs with an opportunity to engage and provide comment on the Project;
- To draw on local knowledge by identifying environmental and social concerns associated with the Project;
- To involve I&APs in identifying methods in which concerns can be addressed;
- To verify that stakeholder comments have been accurately recorded; and
- To comply with the legal requirements.

The Public Participation Process (PPP) has been completed and the stakeholder engagement comments are compiled in a separate report.

## 12. Recommendations

From a socio-economic perspective, it is recommended that the proposed Project should proceed. This recommendation is, however, subject to the following conditions:

- The mitigation and enhancement measures listed for each impact, negative and positive, should be implemented; especially those relating to
  - Impacts associated community health, safety and security as outlined in the respective specialist reports;
- A social management plan and social monitoring plan must be developed to manage and monitor the implementation of these measures and recommend corrective measures, where necessary; and
- Implement mitigation measures recommended in other specialist studies, including traffic, dust, air quality, noise, and ground and surface water, that are likely to have socio-economic impacts.

## 13. Reasoned Opinion Whether Project Should Proceed

Digby Wells does not object to the Project provided the recommendations detailed above are implemented.

## 14. Conclusion

The aims of the Social Impact Assessment were to comply with NEMA EIA Regulations 2014 as they relate to Appendix 6 (Part 1) specialist studies through the following:

- A description of the methodology adopted in preparing the report.



- A description of study limitations and constraints.
- A description of the findings and potential implications of such findings on the impacts of the Project.
- Consideration of socio-economic benefits associated with the Project.
- The provision of implementable mitigation and enhancement measures; and
- Monitoring requirements for inclusion in the EMP or environmental authorisation.

To this end, the objectives of the study have been met in Sections 5 through 12 of this Report. Based on the findings of the study, Digby Wells has no objections to the Project proceeding if all mitigation and enhancement measures provided are implemented.

