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# Pan African Resources PLC Barberton Mines (Pty) Ltd

Fairview Mine
Barberton, Mpumalanga

Proposed Fairview TSF and reclamation of historic dumps
Scoping Report
Issued for public review and comment

LICENCE NUMBER: MP/30/5/1/2/2/191 MR

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# **Executive Summary**

Barberton Mines (Pty) Ltd, which forms part of Pan African Resources PLC, owns and operates the existing Fairview Mine near the town of Barberton, Mpumalanga. Mining in the area commenced in the late 1880's.

At Fairview (Reference Number MP/30/5/1/2/2/191 MR) the Mining operation comprises underground gold mining, as well as surface reclamation of Tailings material. Ore is transported to the processing facilities at the Main Infrastructure Area where it is crushed and milled, before undergoing flotation to produce gold concentrate. Concentrate is further processed at the Biox Plant and the Carbon In Leach (CIL) Plant. Final concentrate is smelted on site to produce gold bullion.

Tailings waste produced by these processes, are currently being deposited on the existing Tailings Storage Facility (TSF) known as the BTRP TSF, or the New Bramber Tailings Dam. The BTRP/New Bramber TSF does not have sufficient capacity to facilitate ongoing production. Barberton Mines therefore proposes to construct a new facility at the site of the original Bramber TSF which has since been reclaimed. The proposed TSF will be referred to as the Fairview TSF.

Historical gold mining in the area has resulted in several waste dumps throughout the area. Many of these dumps still contain high percentages of gold. In addition to the proposed construction of the new Fairview TSF, Barberton Mines wishes to obtain the necessary authorizations to recover material from these historic dumps via mechanical methods and reprocess the material in the existing Fairview Plant. This reprocessing has two main objectives, namely gold recovery from the deposits and environmental clean-up.

Prior to implementing the proposed projects, the Mine is required to apply for authorisation in terms of the following mining and environmental legislation:

- Amendment of the existing Environmental Management Plan (EMP) in terms of Section 102 of the Mineral and Petroleum Resources Development Act (No. 28 of 2002) (MPRDA);
- Environmental Authorisation for Listed Activities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA);
- A Waste Management License (WML) in terms of the National Environmental Management Waste Act, 2008 (Act No 59 of 2008) (NEMWA);
- Destruction permits for heritage resources in terms of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA);
- Relocation Permits for Protected Plant Species in terms of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) (NEMBA); and
- An Integrated Water Use License (IWUL) in terms of the National Water Act, 1998 (Act No. 36 of 1998) (NWA).

This report pertains specifically to the applications in terms of the MPRDA, NEMA, and NEMWA. Barberton Mines have submitted an application in terms of the MPRDA, the NEMA and NEMWA to the Department of Mineral Resources (DMR), who is the competent authority in respect of



these applications. Potential Impacts to Air Quality, Biodiversity, Heritage Resources and Water Resources are also assessed as part of the Scoping and EIA Process.

This report constitutes the Scoping Report in terms of the abovementioned applications, and is submitted to Interested and Affected Parties (I&APs) for a comment period of 30 days.

#### **Project Scope**

This Application relates to three interrelated aspects:

- Application for Amendment of the existing Mining Right MP/30/5/1/2/2/191 MR, to
  - o incorporate the Fairview Surface rights areas where existing Mine Infrastructure is located and ensure the activities occurring at the Fairview Mine are all integrated under one Right, and managed under one EMP;
  - o accommodate the construction of the new Fairview TSF, at the site of the reclaimed Bramber TSF; and
  - accommodate the recovery of material from historic dumps and re-processing of this material at the existing Fairview processing plants.
- Application for Environmental Authorisation for new Listed Activities associated with the new Fairview TSF, and the proposed reclamation of the historic dumps.
- Application for a WML for the new TSF and reclamation of the historic dumps.

A Scoping and Environmental Impact Assessment (EIA) Process is relevant to the application.

#### **Summary of the Project Description**

The Fairview Mining Right Area (MRA) falls within the Mbombela Local Municipality of the Ehlanzeni District Municipality in the Mpumalanga Province.

Road access to the Fairview mine is via the existing Provincial Road D2195. The access road is tarred.

Internal vehicle movement at Fairview Mine is via a series of paved and unpaved roads. The roads at the main infrastructure areas are mostly tarred, only minor roads are gravel.

Access to the historic dumps in the eastern portion of the MRA is via various routes and tracks, mostly dirt tracks. Some of these have recently been upgraded by the Mine to facilitate access to these portions of the MRA. The majority of these tracks are considered pre-existing, but will need to be upgraded to facilitate the proposed reclamation.

The proposed project comprises the following components, discussed separately below:

- Proposed new TSF (the Fairview TSF); and
- Proposed reclamation of historic dumps.

#### **Proposed Fairview TSF:**

The design of the proposed new TSF is underway but not yet concluded.

The proposed new TSF footprint will not exceed 30 Ha. Deposition rate onto the TSF will be 100,000 tons per month. The final height of the facility will not exceed 35 metres from the lowest ground level. The design life of the facility is approximately 5 years. The proposed new TSF is at the footprint of the original Bramber TSF and will abut against the existing BTRP/New Bramber TSF.



Due to a reduced starter wall embankment size and in order to maintain an acceptable rate of rise, it may be required to continue deposition on the BTRP/New Bramber TSF at low tonnages over a three-year period. Material for the construction of the embankment will be sourced from the TSF footprint.

#### **Proposed Reclamation:**

Ten (10) historic waste dumps have been identified to date within the Fairview MRA, that the Holder wishes to recover. These dumps include waste rock and tailings material that resulted from past mining and processing activities (over the past 100 years). None of these dumps were established by the current Holder of the Mining Right. At the time they were established, no legislation requiring the licensing of these dumps existed. These dumps were established in areas now included in the Fairview MRA. Accurate information about the exact dates these dumps were established is not available.

These dumps are located within the proclaimed boundaries of the Barberton Nature Reserve that overlaps with the Fairview MRA, in extremely mountainous terrain. The dumps are generally difficult to access and the current impact of these dumps relate primarily to surface water impacts as many of these dumps are located within or immediately adjacent to drainage lines.

The Mine proposes to recover this material via mechanical means (i.e. with Front-end-loaders or similar equipment), and transport the material via existing tracks (which will be upgraded) to the Fairview Mine Processing Plants. The areas will then be shaped and re-vegetated.

#### **Environmental Context of the Project**

The entire Fairview MRA falls within the current boundaries of the Barberton Nature Reserve (BNR) as identified in the South Africa Protected Areas Database (SAPAD). Barberton Mines holds the surface rights to those farms where the TSFs are located, and will also apply to have these surface right areas included in their MRA. The surface rights fall just outside of the BNR boundary.

The area on and around the site has been extensively affected by historic mining activities over the past 100 years. There are remnants of old waste rock dumps and TSFs scattered throughout the MRA.

Areas not directly affected by past mining contain relatively pristine vegetation. Various frogs and birds are known to occur in the area and bats frequent old mine adits throughout the site and surroundings. Anthropogenic influence has likely caused most larger mammals to migrate.

The site and surrounding areas contain numerous heritage resources including graves and structures older than 60 years, primarily associated with historic mining activity.

#### **Legal Context of the Project**

The Fairview Mine has consistently aligned with changing mineral regulation throughout its operational life, gaining approval in terms of Section 39 of the Minerals Act (No. 50 Of 1991) in 2003, and subsequently aligning with the requirements of the Mineral and Petroleum Resources Development Act (No. 28 of 2002) (MPRDA) in 2010.



The MPRDA holds that a mining right granted in terms of the MPRDA is a limited real right in respect of the mineral and the land to which such right relates. The Act further states that the Holder of a Mining Right may access the land to which their Mining Right relates, and prospect, mine and produce on that land for the Mineral to which the Right pertains.

The MPRDA further states that nobody may mine without environmental authorisation (Section 5A). On the 2<sup>nd</sup> September 2014, the One Environmental System for mining came into effect making the NEMA the overarching National environmental legislation. In terms of Section 12(4) of the NEMA Amendment Act, 2008 (Act No. 62 of 2008) an EMP approved in terms of the MPRDA, prior to the One Environmental System coming into effect, is regarded as having been approved in terms of NEMA.

Changes to the approved activities (e.g. establishment of access roads and mechanical recovery of material from historic dumps, the establishment of a new TSF) will be subject to Environmental Authorisation being granted in terms of NEMA and the EIA Regulations, 2014 (as amended), and consent of the Minister of Mineral Resources in terms of Section 102 of the MPRDA.

The National Environmental Management Waste Act, 2008 (Act No. 59 of 2008) (NEMWA) requires that a Waste Management License (WML) be obtained for (among others) the establishment of Residue Stockpiles (like the proposed Fairview TSF). An application for a WML is also made and is an integrated process.

Fairview Mine also holds an approved Water Use License in terms of the National Water Act, 1998 (Act No 36 of 1998) (NWA). New water uses associated with the proposed activities will be applied for from the Department of Human Settlements, Water and Sanitation (DHSWS, formerly the Department of Water and Sanitation, DWS) through the Inkomati-Usuthu Water Management Agency (IUCMA) as the competent authority in respect of water use licensing in this area. This process is being managed by Escon Consulting.

#### **Preliminary Impact Assessment**

The purpose of the impact assessment is to determine the significance of potential impacts associated with the proposed project activities, so that those activities that are expected to result in substantial impacts can be altered, or management measures imposed to lessen the impact significance.

A detailed impact assessment will be undertaken as part of the EIA Phase. This scoping report only aims to identify preliminary anticipated impacts and their anticipated significance.

If appropriate management and mitigation measures are not implemented, the project is expected to impact on the receiving environmental aspects as follows:

- Destruction and degradation of floral communities and possible loss of species of conservation concern, due to direct destruction, pollution, poaching by mine employees or general disturbance and proliferation of alien and invasive species;
- Fauna mortalities or reduced faunal diversity due to increased human activities, vehicle and machinery operation and/or loss of suitable habitat;
- Loss of soil resources due to pollution, erosion or compaction;
- Deterioration of air quality due to dust and emissions;



- Increase in environmental noise;
- Reduced surface water quality due to pollution and/or sedimentation;
- Reduced groundwater quality due to pollution (spills) or mineral waste facilities leaching contaminants to the groundwater resource;
- Alteration of the visual character of the site;
- Negative social impacts, such as an influx of job seekers to the area, threats to
  employee safety, littering, fires, increased poaching due to an increased number of
  people on site and in the surroundings;
- Direct destruction of heritage resources or damage to heritage resources by ancillary activities (unauthorised driving outside of designated roads, employees accessing areas outside of the footprint etc.), or by direct means (reclaiming of historic dumps; and
- Positive social impacts associated with job creation (albeit temporary in nature) and job-retention due to the continued operation of Fairview Mine.

It is important to understand, in this context, that operations at Fairview Mine cannot continue if the Mine does not have sufficient tailings storage capacity. Thus, if the proposed Fairview TSF is not established, alternative disposal of tailings will have to be identified (which is limited to constructing another TSF or disposing of the tailings into underground workings), or the Fairview Mine will have to cease operations.

#### Plan of study for EIA

In summary, the tasks that will be undertaken as part of the EIA Process include:

- 1. Refine the project description so the detail is sufficient to identify each project-related activity that could impact on the surrounding environment;
- 2. Describe the likely nature of the impacts;
- 3. Define the significance of each impact, in the absence of management and mitigation measures;
- 4. Rank the impacts in order of significance and identify avoidance, management and/or mitigation measures for each;
- 5. Re-assess the impact significance taking the proposed management measures into account;
- 6. Compile the management measures into a comprehensive EMP that must be implemented during the different project phases and against which compliance can be audited (update the existing Fairview EMP to incorporate these new specific measures);
- 7. Formulate a monitoring and auditing plan for the proposed projects to ensure the EIA/EMP is regularly updated and will remain valid and relevant throughout the LoM, and that potential non-compliances can be addressed immediately;
- 8. Based on the impact significance, after mitigation measures have been applied, formulate a professional opinion on the benefits and risks of the project to assist the decision-making authorities in assessing the merit of the Project and reaching a decision on the Project.



All the preceding steps go hand-in-hand with public and authority consultation as well as specialist input. The following specialist studies have been commissioned as part of the EIA Process:

- Groundwater Impact Assessment;
- Terrestrial Biodiversity Assessment (Flora and Fauna);
- Freshwater Ecological Assessment (Aquatic Assessment and wetland identification);
- Soils and hydro-pedology Assessment;
- Heritage and Palaeontological Assessments; and
- Air quality Impact Assessment.

In addition to the specialist studies commissioned as part of the EIA Process, a Rehabilitation plan will be compiled and financial provision for closure of the Project elements will be calculated.

#### **Public Participation**

The public participation process (PPP) aims to involve the authorities and interested and affected parties (I&APs) in the project process; and determine their needs, expectations and perceptions. An open and transparent process was and will be followed at all times and is based on the reciprocal dissemination of information.

The PPP comprises the following phases / steps:

- Identify all relevant stakeholders, including (but not limited to) affected and adjacent land owners and occupants, relevant government institutions and NGO's, the relevant municipalities and ward councillor and any other person who may have an interest in the Project;
- 2. Compile a register of all I&APs as identified above and update the I&AP register throughout the process;
- 3. Undertake pre-application consultative meetings with the Department of Mineral Resources (DMR) as the competent authority in this application. Other targeted consultation meetings may also be arranged with key role-players;
- 4. Notify I&APs of the proposed project and application process via the following means:
  - a. Publication of a newspaper advertisement in a popular local newspaper in English and Siswati;
  - b. Display of posters (site notices) in English and Siswati at the project site and in prominent locations easily accessible to the public; and
  - c. Distribute notification letters / background information documents (BIDs) to I&APs via e-mail, fax, post and hand delivery on site.
- 5. Make the Scoping Report (this report) available in digital and hard copy to I&APs for review and comment. During the comment period, host a scoping-phase public meeting to present the proposed project to I&APs, and gather their comments, thoughts and/or concerns. Incorporate I&AP comments into the final scoping report for submission to the DMR.
- 6. Once the DMR approves the Scoping Report (including the Plan of Study for EIA), compile the EIA Report and similarly make the Report available to I&APs for review and comment. During the comment period, host an EIA-phase public meeting to present



the findings of the specialist assessments and EIA to I&APs, and gather their comments. Incorporate I&AP comments into the final EIA report and EMP, for submission to the DMR.

7. Once the DMR reaches a decision on the EIA and EMP, and communicates their decision to the Applicant, notify I&APs of the decision, reasons for the decision, and the appeal process that I&APs may follow if they do not agree with the decision or a part thereof.

#### Conclusion

This report constitutes the Scoping Report for the proposed Fairview TSF, and proposed reclamation of historic dumps at Fairview Mine.

The Report is made available to I&APs for a comment period of 30 days.

This report will be available for comment as follows:

- In hard copy at the Barberton Public Library; and
- On the Cabanga Environmental Website (<u>Cabanga Environmental</u>) (under "public documents" tab).

Details of the public meetings will be communicated to registered Interested and Affected Parties in due course.

Following conclusion of the comment period, this report will be updated with comments and potential additional information received from I&APs, and submitted to the DMR for consideration. The EIA phase will commence after conclusion of the scoping phase, and registered I&APs will be kept informed of the Project progress.



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# **ACRONYMS AND ABBREVIATIONS**

| ACRONYM    | DESCRIPTION:   |
|------------|--|
| AQIA       | Air Quality Impact Assessment  |
| ARD /AMD   | Acid Rock Drainage / Acid Mine Drainage                              |
| BEE        | Black Economic Empowerment   |
| BML        | Barberton Mines (Pty) Ltd  |
| BNR        | Barberton Nature Reserve   |
| BTRP       | Barberton Tailings Retreatment Plant                                 |
| CARA       | Conservation of Agricultural Resources Act, 1983 (Act No 43 of 1983) |
| СВА        | Critical Biodiversity Area   |
| CIL        | Carbon In Leach  |
| CRR        | Comment and Response Report  |
| DEA        | Department of Environmental Affairs                                  |
| DHSWS/ DWS | Department of Human Settlements, Water and Sanitation                |
| DMR        | Department of Mineral Resources                                      |
| EAP        | Environmental Assessment Practitioner                                |
| EAPASA     | Environmental Assessment Practitioner's Association of South Africa  |
| EIA        | Environmental Impact Assessment                                      |
| EIS        | Ecological Importance and Sensitivity                                |
| EMP        | Environmental Management Plan  |
| ESA        | Ecological Support Area  |
| GIS        | Geographic Information System  |
| I&APs      | Interested and Affected Parties                                      |
| ICOMOS     | International Council on Monuments and Sites                         |
| IDP        | Integrated Development Plan  |
| IEM        | Integrated Environmental Management                                  |
| IUCMA      | Inkomati-Usuthu Water Management Agency                              |
| IUCN       | International Union for the Conservation of Nature                   |
| IWUL(A)    | Integrated Water Use License (Application)                           |
| IWWMP      | Integrated Water and Waste Management Plan                           |



| ACRONYM | DESCRIPTION:   |
|---------|--|
| LoM     | Life of Mine   |
| MHSA    | Mine Health and Safety Act, 1996 (No 29 of 1996)                                 |
| MLM     | Mbombela Local Municipality  |
| MPRDA   | Mineral and Petroleum Resources Development Act, 2002 (No. 28 of 2002)           |
| MRA     | Mining Right Area  |
| MTPA    | Mpumalanga Tourism & Parks Agency  |
| MWP     | Mine Work Programme  |
| NAAQS   | National Ambient Air Quality Standards   |
| NAEIS   | National Atmospheric Emissions Information System                                |
| NEMA    | National Environmental Management Act, 1998 (Act No. 107 of 1998)                |
| NEMAQA  | National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004)    |
| NEMBA   | National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)   |
| NEMPAA  | National Environmental Management: Protected Areas Act, 2003 (Act No 57 of 2003) |
| NEMWA   | National Environmental Management Waste Act, 2008 (Act No 59 of 2008)            |
| (N)FEPA | (National) Freshwater Ecosystems Priority Areas                                  |
| NHRA    | National Heritage Resources Act, 1999 (Act No. 25 of 1999)                       |
| NWA     | National Water Act, 1998 (Act No. 36 of 1998)                                    |
| PES     | Present Ecological State   |
| PPP     | Public Participation Process   |
| SABAP   | South African Bird Atlas Project   |
| SAPAD   | South Africa Protected Areas Database  |
| SCC     | Species of Conservation Concern  |
| SDF     | Spatial Development Framework  |
| SHEQ    | Safety, Health, Environment & Quality  |
| SLP     | Social and Labour Plan   |
| SPLUMA  | Spatial Planning, Land Use and Management Act, 2013 (Act No. 16 of 2013)         |
| SWMP    | Stormwater Management Plan   |
| TSF     | Tailings Storage Facility  |
| ULM     | Umjindi Local Municipality   |
| UNESCO  | United Nations Educational, Scientific and Cultural Organization                 |



| ACRONYM | DESCRIPTION:              |
|---------|---------------------------|
| WHS     | World Heritage Site       |
| WMA     | Water Management Area     |
| WML     | Waste Management License  |
| WRC     | Water Research Commission |
| WRD     | Waste Rock Dump           |



#### 1 Introduction

Barberton Mines (Pty) Ltd (BML), which forms part of Pan African Resources PLC, owns and operates the Fairview Mine, New Consort Mine, Sheba Mine and Barberton Tailings Retreatment Plant (BTRP) near the town of Barberton, Mpumalanga (Figure 1).

Mining in the Fairview area commenced in the 1880's. Today, Fairview Mine has an approved Mining Right (Reference Number MP/30/5/1/2/2/191 MR) and Environmental Management Plan (EMP) in terms of the Mineral and Petroleum Resources Development Act (No. 28 of 2002) (MPRDA) (Van Der Merwe, August 2010).

The Mining operation comprises underground gold mining through the No 11 Adit, as well as surface reclamation of Tailings material. Ore is transported from the No. 11 Adit via aerial ropeway to the processing facilities, while material is hydraulically reclaimed from Tailings facilities and piped to the processing facilities. Processing involves crushing, milling and flotation to produce gold concentrate, which is further processed at the Biox Plant and the Carbon In Leach (CIL) Plant. Final concentrate is smelted on site to produce gold bullion. Flotation Tailings and CIL Tailings are produced by these processes, Tailings is currently being deposited on a Tailings Storage Facility (TSF) known as the BTRP/New Bramber TSF.

Ongoing production will soon necessitate additional capacity for storage of Tailings material. BML therefore proposes to construct a new TSF at the site of the original Bramber TSF which has since been reclaimed. The new TSF will be referred to in this report as the Fairview TSF.

Due to the long history of gold mining in the area, several waste dumps resulting from historic mineral extraction and processing exist throughout the Area. Many of these dumps still contain high percentages of gold.

In addition to the proposed construction of the new Fairview TSF, BML wishes to obtain the necessary authorizations to recover material from these historic dumps via mechanical methods and re-process the material in the existing Fairview Plant. This reprocessing has two main objectives, namely gold recovery from the deposits and environmental clean-up.

BML is therefore required to apply for authorisation in terms of the following mining and environmental legislation:

- Amendment of the existing EMP in terms of Section 102 of the MPRDA;
- Environmental Authorisation for Listed Activities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), and the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended);
- A Waste Management License (WML) in terms of the National Environmental Management Waste Act, 2008 (Act No 59 of 2008) (NEMWA) and the Regulations Listing Waste Management Activities that have, or are likely to have, a detrimental effect on the environment (as amended);
- Destruction permits for heritage resources in terms of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA);
- Relocation Permits for Protected Plant Species in terms of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) (NEMBA); and



 An Integrated Water Use License (IWUL) in terms of the National Water Act, 1998 (Act No. 36 of 1998) (NWA) and the Water Use License Application (WULA) and Appeals Regulations, 2017<sup>1</sup>.

BML has submitted an application in terms of the MPRDA, the NEMA and NEMWA to the Department of Mineral Resources (DMR), who is the competent authority in respect of these applications. The EIA process which is being undertaken also pertains to the applications required in terms of the NEMBA and NHRA. Potential Impacts to Air Quality, Ecology, Heritage Resources and Water Resources are also assessed as part of the Scoping and EIA Process.

This report constitutes the Scoping Report compiled in terms of the abovementioned applications, and is submitted to Interested and Affected Parties (I&APs) for a comment period of 30 days.

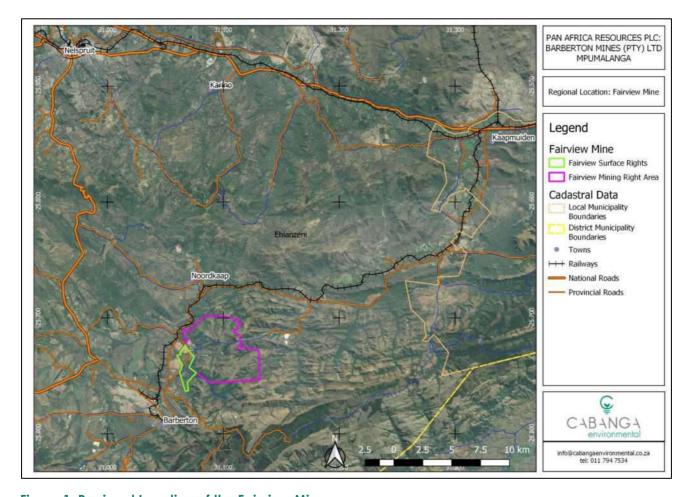


Figure 1: Regional Location of the Fairview Mine

<sup>&</sup>lt;sup>1</sup> Please note the IWULA in terms of the NWA is being addresses directly with the Inkomati-Usuthu Catchment Management Agency (IUCMA) as part of a separate application process, managed by Escon Consulting.



# 1.1 Structure of the Report

The required content of a Scoping Report is prescribed in Appendix 2 of the EIA Regulations, 2014 (as amended). Table 1 presents these requirements and provides cross-references to the various sections of this report where the requirements are addressed.

Table 1: Structure of the Scoping Report

| No  | Requirement  | Section of this report   |  |
|-----|--|--|--|
| 1   | A scoping report must contain the information that is necessary for a proper understanding of the process, informing all preferred alternatives, including location alternatives, the scope of the assessment, and the consultation process to be undertaken through the environmental impact assessment process, and must include:  |  |  |
| (a) | details of—  (i) the Environmental Assessment Practitioner (EAP) who prepared the report; and  (ii) the expertise of the EAP, including a curriculum vitae;  | Section 1.2<br>Section 1.3   |  |
| (b) | the location of the activity, including—  (i) the 21-digit Surveyor General code of each cadastral land parcel;  (ii) where available, the physical address and farm name;  (iii) where the required information in items (i) and (ii) is not available, the coordinates of the boundary of the property or properties;  | Section 2.2  |  |
| (c) | a plan which locates the proposed activity or activities applied for at an appropriate scale, or, if it is—  (i) a linear activity, a description and coordinates of the corridor in which the proposed activity or activities is to be undertaken; or  (ii) on land where the property has not been defined, the coordinates within which the activity is to be undertaken; | See Appendix A for<br>A3 Plans.<br>Also See Figure 4<br>and Figure 5 |  |
| (d) | a description of the scope of the proposed activity, including—  (i) all listed and specified activities triggered;  (ii) a description of the activities to be undertaken, including associated structures and infrastructure;  | Section 2.3  |  |
| (e) | a description of the policy and legislative context within which the development is proposed including an identification of all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks and instruments that are applicable to this activity and are to be considered in the assessment process;                                  | Section 3  |  |



| No  | Requirement  | Section of this report |
|-----|--|------------------------|
| (f) | motivation for the need and desirability for the proposed development including the need and desirability of the activity in the context of the preferred location;  | Section 4              |
| (g) | a full description of the process followed to reach the proposed preferred activity, site and location of the development footprint within the site, including—  (i) details of all the alternatives considered;   | Section 5              |
| (g) | (ii) details of the public participation process undertaken in terms of regulation 41 of the Regulations, including copies of the supporting documents and inputs;  (iii) a summary of the issues raised by interested and affected parties, and an indication of the manner in which the issues were incorporated, or the reasons for not including them; | Section 6              |
| (g) | (iv) the environmental attributes associated with the alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects;  | Section 7              |
| (g) | (v) the impacts and risks which have informed the identification of each alternative, including the nature, significance, consequence, extent, duration and probability of such identified impacts, including the degree to which these impacts—   | Section 5              |
|     | <ul><li>(aa) can be reversed;</li><li>(bb) may cause irreplaceable loss of resources; and</li><li>(cc) can be avoided, managed or mitigated;</li></ul>   |                        |
| (g) | (vi) the methodology used in identifying and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks associated with the alternatives;   | Section 8.1            |
| (g) | (vii) positive and negative impacts that the proposed activity and alternatives will have on the environment and on the community that may be affected focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects;  | Section 8              |
| (g) | (viii) the possible mitigation measures that could be applied and level of residual risk;  | Section 8              |
| (g) | (ix) the outcome of the site selection matrix;   | Section 5              |



| No  | Requirement   | Section of this report |
|-----|---|------------------------|
| (g) | (x) if no alternatives, including alternative locations for the activity were investigated, the motivation for not considering such; and  | Section 5              |
| (g) | (xi) a concluding statement indicating the preferred alternatives, including preferred location of the activity;  | Section 10             |
| (h) | A plan of study for undertaking the environmental impact assessment process to be undertaken,   | Section 9              |
| (i) | An undertaking under oath or affirmation by the EAP in relation to—   | Section 1.2            |
|     | (i) the correctness of the information provided in the report;  |                        |
|     | (ii) the inclusion of comments and inputs from stakeholders and interested and affected parties; and  |                        |
|     | (iii) any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested or affected parties;   |                        |
| (j) | an undertaking under oath or affirmation by the EAP in relation to the level of agreement between the EAP and interested and affected parties on the plan of study for undertaking the environmental impact assessment; | Section 1.2            |
| (k) | where applicable, any specific information required by the competent authority  | Section 11.1           |
| (1) | any other matter required in terms of section 24(4)(a) and (b) of the Act.  | Section 11.1           |



## 1.2 Details of the Report Author

The details of the persons who prepared this report are provided in Table 2

Table 2: Details of the Author

| Author                    | Lelani Claassen   |
|---------------------------|---|
| Highest qualification     | BSc Hons Environmental Management   |
| Years' experience         | 10+ years   |
| Professional registration | Registered Environmental Assessment Practitioner (EAP) with<br>the Environmental Assessment Practitioner's Association of<br>South Africa (EAPASA). Registration Number 2018/153. |
| Review                    | Ken van Rooyen  |
| Highest qualification     | MSc Geography   |
| Years' experience         | 30 years  |
| Professional registration | Pr.Sci.Nat (Reg. 121/93)  |
| Review                    | Jane Barrett  |
| Highest qualification     | BSc Environmental Management & Botany   |
| Years' experience         | 10+ years   |

#### 1.3 Expertise of the EAP

Lelani Claassen started her career as an environmental consultant in 2008. She holds an Honours degree in Environmental Management from UNISA, which she completed whilst working as an environmental consultant following the successful completion of a BSc Degree in Landscape Architecture from the University of Pretoria. She has also successfully completed the SABS Short-course: Environmental Legal Requirements for ISO 14001 compliance. Her project experience is extensive in scope and covers various aspects of development including residential developments, filling stations and depots, infrastructure and mining projects.

Lelani's experience includes environmental authorization processes: Basic Assessments, Environmental Impact Assessments, Environmental Management Plans and Programmes, Mining Right Applications, Water Use Licensing, Concept (Fatal Flaw), Pre-Feasibility and Feasibility Studies. She also has experience as an Environmental Control Officer on construction projects. Lelani has also completed numerous environmental compliance audits and environmental-legal compliance assessments.

Lelani is a Registered EAP (Registration Number 2018/153) with the Environmental Assessment Practitioner's Association of South Africa (EAPASA), the Registration Authority for EAPs in South Africa in terms of Section 24H of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA). From 08 February 2020, it will be compulsory to be registered in order to undertake and review Environmental Impact Assessments.



## 1.4 Undertaking by the EAP

#### I, Lelani Claassen, herewith confirm:

- That the information provided in this report are to the best of my knowledge true and correct:
- That comments and inputs from stakeholders and interested and affected parties that have been communicated to Cabanga Environmental, have been included in this report;

This report is being made available for a public comment period of 30 days. After receipt of comments from the Public, I will be in a position to comment on the level of agreement between the EAP and interested and affected parties on the plan of study for undertaking the environmental impact assessment.

I further declare that -

- I act as the independent environmental practitioner in this application;
- 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 have no, and will not engage in, conflicting interests in the undertaking of the activity. I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Regulations;
- there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting EIAs, including knowledge of the relevant Acts, Regulations and any guidelines that have relevance to the proposed 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;
- I will ensure that participation by I&APs is facilitated so that all I&APs will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced for the application .I will keep a register of I&APs and ensure that the comments of all I&APs are recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by I&APs in respect of a final report may be attached to the report without further amendment to the report; and
- I realise that a false declaration is an offence and is punishable by law.

| Signature of the EAP:  | Date: |  |
|--|-------|--|
| Name of company: Cabanga Concepts CC (t/a Cabanga Environmental) |       |  |



## 2 Details of the proposed Project

The purpose of this section of the report is to provide details of the Location and Nature of the proposed Project. Details of the Project Applicant are provided in Table 3.

Table 3: Details of the Project Applicant

| Project applicant:             | Barberton Mines (Pty) Ltd Fairview Mine   |       |                                    |
|--------------------------------|---|-------|------------------------------------|
| Registration No:               | 1938/011761/07  |       |                                    |
| Primary contact person         | General Manager: Jan Thirion  |       |                                    |
| Alternative Contact person:    | Group SHEQ Manager: Mandla Ndlozi   |       |                                    |
| Head-Office Address:           | The Firs, Corner Cradock and Biermann Avenues, Rosebank, Johannesburg, South Africa |       |                                    |
| Mine Address:                  | Fairview mine, off the R38 on Provincial Road D2195, Barberton                      |       |                                    |
| Central Coordinate of the Mine | 25°43'45.44"S; 31° 3'58.58"E  |       |                                    |
| Postal Address:                | P.O. Box 121 Barberton, 1300  |       |                                    |
| Telephone:                     | +27 13 712 8500<br>+27 11-243-2900  | Cell: | +27 66 476 3292<br>+27 71 403 9219 |
| E-mail:                        | jant@bmines.co.za<br>mandlan@bmines.co.za   | Fax:  | +27 13 712 9060<br>+27 11 880 1240 |

## 2.1 Historical Context

The town of Barberton was established in 1884 by the Gold Commissioner, after Henry and Fred Barber discovered gold in the area. It is reported that Tom McLachlan found the first traces of alluvial gold in the area as long ago as 1874. Gold Mines in the area have flourished ever since and four operational Gold Mines remain in the Barberton area today, that have been operational for over 100 years (including Sheba, the oldest mine discovered by Edward Bray, New Consort, Fairview and Agnes Gold Mines).

Mining at the Fairview Mine area started in 1886 as a number of small operations. These continued intermittently until 1955 when they were consolidated under Federale Mynbou. ETC acquired Fairview Mine in 1998. The ETC operations consisting of Fairview, New Consort and Sheba was bought by Metorex (Pty) Ltd and Millennium Consolidated Investments in June 2003. Subsequently the Mine was owned and operated by Pan African Resources and Shanduka since 2009 (https://lowvelder.co.za/feat/barberton-mines/).

Currently Barberton Mines is Pan African Resources flagship gold project, producing between 95,000 to 100,000 oz per year at an average all-in sustaining cost of approximately US\$1,100/oz (https://www.panafricanresources.com/operations-overview/barberton/).



Over the past 100 years of these Mines' operations, the remaining life of each of the mines has often been forecast as being only six to 10 years. The mines have consistently defied these estimates in the past and have continued to operate with new ore bodies and extensions adding to resources and reserves (https://lowvelder.co.za/feat/barberton-mines/).

The entire Mining Right Area (MRA) of the Fairview Mine falls within the Barberton Nature Reserve (BNR), with infrastructure areas including the Original and current Bramber TSFs situated on land owned by BML, immediately west of the BNR. This portion of the BML was originally known as the Mountainlands Nature Reserve and was first reserved for conservation in 1985 (https://www.mountainlands.co.za/mountainlands-reserve-introduction/). Mountainlands was identified as Phase 3 of the BNR and incorporated in the BNR Integrated Management Plan (MTPA, 2012).

It is concluded that mining and conservation in the immediate area have been in conflict to some degree since 1985, despite the pre-existence of active mining activities since the late 1880's. The conflicting land uses are however both duly authorised:

- Fairview Mine is authorized in terms of the NEMA and MPRDA as further discussed in Section 3, and
- The BNR is proclaimed and authorized in terms of the National Environmental Management: Protected Areas Act, 2003 (Act No 57 of 2003) (NEMPAA).

Mining by nature is associated with a limited life-span as the reserves being exploited are considered non-renewable and will eventually be mined out. The majority of surface activities at Fairview Mine are located outside of, or right on the edge of the proclaimed boundaries of the BNR, which presents an opportunity for these land uses to co-exist without affecting one another negatively. Several remnants of historical mining activities which exist within the Fairview MRA (and therefore also within the BNR) may present opportunities for tourism-related activities within the BNR, while others present a threat to the conservation land use intended by the regulators responsible for conservation (Mpumalanga Tourism and Parks Agency, MTPA). As the MTPA is now the custodian of the land, BML cannot lay claim to the historic dumps in terms of common-law or surface rights. However, the removal of surface dumps of historic mine waste material from the boundaries of the BNR as proposed by BML will likely improve the conservation potential of the land in question.

Immediately south and east of the Fairview MRA, lies the Barberton-Makhonjwa Mountains World Heritage Site (WHS), which was inscribed on the World Heritage List in 2018. The Barberton Makhonjwa Mountains contain the best-preserved, oldest and most diverse sequence of volcanic and sedimentary rocks on Earth (DEA, January 2017).

Conventional perimeter buffer zones are not mandatory for WHSs and may be omitted with reasons. The Nomination Dossier for this WHS states that "geosites are only threatened by direct in situ impacts, so buffer zones protecting against external threats are redundant". The Fairview Mine should therefore not have any direct impacts on the WHS inscription.



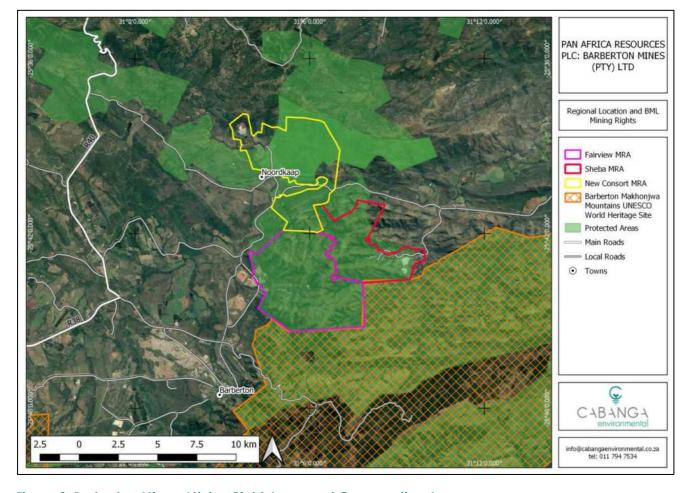


Figure 2: Barberton Mines: Mining Right Areas and Conservation Areas

## 2.2 Project Location

Fairview Mine is located in the Mbombela Local Municipality of the Ehlanzeni District Municipality in the Mpumalanga Province of South Africa (Figure 1). The area formed part of the Umjindi Local Municipality before Umjindi Municipality was disestablished and merged with Mbombela Local Municipality to establish the City of Mbombela Local Municipality on 3 August 2016.

The Fairview MRA comprises the following properties (according to the converted Mining Right MP30/5/1/2/2/191MR) subject to Regulation 17 of the Mine Health and Safety Act, and thus excluding any area within 100m of any public road, railway, cemetery, residential area or public area.

- Lots 119, 120, 123, 124, 126, 136, 137, 138, 140, 141, 142, 143 and 144 of Section A Kaap Block
- The Farm Worral 352 JU,
- The Farm Bickenhall 346 JU,
- The Farm Bramber Est 314 JU, and
- The Farm Hayward 310 JU,



The abovementioned Farms have subsequently been consolidated / subdivided and renamed and some inconsistency exists between different property / farm portion databases. The above list of farms as it appears in the Fairview Mining Right remains valid, with the addition of the Farm Sheba 940JU.

BML, the Holder of the Mining Right at Fairview, is also the surface rights owner of the Farm Fairview 542 JU, and the Farm Bramber South 348 JU, adjoining the MRA (Van Der Merwe, August 2010). Fairview Mine infrastructure is also located on the Farms Bramber East 314 JU, over which the Mine had extensive rights to use the surface in terms of section 51(1) of the Minerals Act (Act No 50 of 1991). BML is engaged in discussions with the relevant land owners (local government) to continue to use these farms under a similar agreement.

The proposed project relates to the proposed construction of the Fairview TSF, on the footprint of the reclaimed Bramber TSF, which is located on the Farm Fairview 542 JU.

Furthermore, it is proposed to include the Farms Fairview 542 JU, Bramber South 348 JU and Bramber East 314 JU into the Fairview MRA, as these properties contain infrastructure associated with the Fairview Mine (including the TSFs).

Additionally, historic TSFs and waste rock dumps that may be economically recoverable are located throughout the MRA, on the Farm Sheba 940 JU (also known as "Staats grond" with SG code: T0JU00000000056300000).

The Location of the different project elements are provided in Figure 3.

The direction and distance from the Fairview TSF site (at the site of the reclaimed Bramber TSF) to the nearest towns are provided in Table 4.

Table 4: Direction and distance to surrounding towns

| Town Name              | Direction from site | Linear Distance from site |
|------------------------|---------------------|---------------------------|
| Barberton              | South-South-West    | 6.5 km                    |
| Sheba                  | East                | 10 km                     |
| Bulembu (border post)  | South               | 25 km                     |
| Mbombela (Nelspruit)   | North-North West    | 30 km                     |
| Piggs Peak (Swaziland) | South-East          | 30 km                     |

The proposed Fairview TSF is proposed on the footprint of the original Bramber TSF, which is located outside of the proclaimed nature reserve boundary. The historic TSFs that are targeted for reclamation are located within the current boundary of the BNR and the approved Fairview MRA.



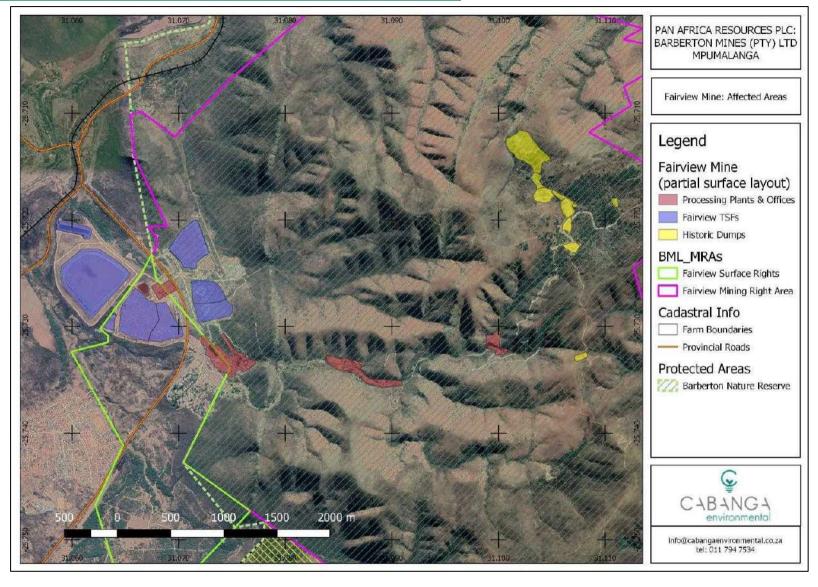


Figure 3: Affected Area



# 2.3 Project Scope

This Application relates to three interrelated aspects:

- Application for Amendment of the existing Mining Right MP30/5/1/2/2/191MR, to
  - incorporate the Fairview Surface rights areas where the existing TSFs are located and ensure the activities occurring at the Fairview Mine are all integrated under one Right, and managed under one EMP;
  - o accommodate the construction of the new Fairview TSF, at the site of the reclaimed Bramber TSF; and
  - accommodate the recovery of material from historic dumps and re-processing of this material at the existing Fairview processing plants.
- Application for Environmental Authorisation for new Listed Activities associated with the new Fairview TSF, and the proposed reclamation of the historic dumps.
- Application for a Waste Management License (WML) for the new TSF and reclamation of the historic dumps.

There are new Listed Activities associated with the proposed Project. These Activities are identified in terms of Listing Notice 1, 2 and 3 of the EIA Regulations 2014 (as amended) and Category A, B and C of the List of Waste Management Activities that have, or are likely to have, a detrimental effect on the environment (as amended)

A Scoping and Environmental Impact Assessment (EIA) Process is therefore relevant to the application.

The EIA Process will focus on the proposed activities associated with the Project. While the existing impacts from current and past mining activities on the site will be informative of the baseline conditions of the site and the cumulative nature of some of the potential impacts, the existing impacts of the Fairview Mine will not be the focus of the study. The EMP will be amended as part of this process to ensure that Fairview Mine can operate under one, consolidated EMP.

#### 2.4 Project Description

The purpose of this section is to provide the public with sufficiently detailed information regarding the project to facilitate meaningful public participation; and to provide the relevant decision-making authorities with sufficiently detailed information about the proposed project to enable informed consideration of the application, and decision-making.

#### 2.4.1 Proposed new TSF

Continued gold production at Fairview Mine means that the BTRP/New Bramber TSF will soon reach capacity. BML intends to construct a new TSF on the footprint of the Old Bramber TSF (which is currently being reclaimed as part of the BTRP), to accommodate future tailings deposition. It is further proposed to earmark the footprints of the Moon TSF and Harper North and South TSFs (being reclaimed or planned to be reclaimed) for future TSF development, though no design of such new TSFs are available currently.

The abovementioned TSFs are shown in Figure 5.

The design of the proposed new TSF is underway but not yet concluded.



The proposed new TSF footprint will not exceed 30 Ha. Deposition rate onto the TSF will be 100,000 tons per month. The final height of the facility will not exceed 35 metres from the lowest ground level. The design life of the facility is approximately 5 years.

The proposed new TSF embankment is being designed not to encroach on the 100m regulated zone from the non-perennial stream south of the TSF site (that joins the Hyslops Creek just west of the TSF). However, due to the footprint of the previous Bramber TSF, catchment paddocks and solution collection infrastructure will be located within 100m of the watercourse and exemption in terms of GN704 (see Section 3.2.3.1) must be applied for as part of the Water Use License Application.

Due to a reduced starter wall embankment size and in order to maintain an acceptable rate of rise, it may be required to continue deposition on the BTRP/New Bramber TSF at low tonnages over a three-year period. Material for the construction of the embankment will be sourced from the TSF footprint area as part of the base preparation.

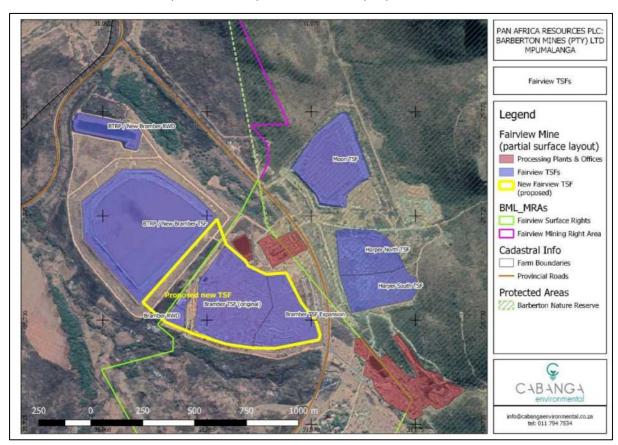


Figure 4: Location of the Fairview Mine TSFs

#### 2.4.2 Proposed reclamation activities

Ten (10) historic waste dumps have been identified to date within the Fairview MRA, that the Holder wishes to recover. These dumps include waste rock and tailings material that resulted from past mining and processing activities (over the past 100 years). At the time these dumps were established, no legislation requiring the licensing of these dumps existed. They are



however located within the Approved Fairview MRA. Accurate information about the exact dates these dumps were established, and the persons responsible for establishing them, is not available. The location of the dumps is shown in Figure 5.

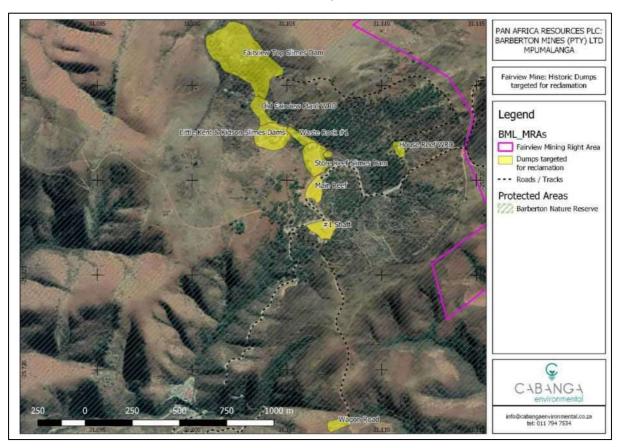


Figure 5: Dumps targeted for reclamation

#1 Shaft is located immediately adjacent to an existing mine road, which was upgraded to enable access to the dump. A road (approximately 100m in length) was established from #1 Shaft Waste Rock Dump (WRD) to Main Reef WRD. Upgrades / construction involved widening where necessary for safety of vehicles, surfacing with gravel where necessary to prevent erosion and removal of vegetation (mostly roadside weeds).

The remnants of the historic #1 Shaft remains on site (Figure 6). The area should be shaped, top-soiled and re-vegetated (by hydroseeding or similar). The remains of #1Shaft Infrastructure should be removed from the site and the shaft sealed to prevent access by illegal miners. The same applies to the Main Reef WRD, once reclamation has been completed (Figure 7).







Figure 6: #1 Shaft (left) and reclaimed area (right)

Figure 7: Reclamation area at Main Reef WRD

There is an existing, historic road from where access to Store Reef WRD and Store Reef Slimes Dam can be obtained. More likely BML will access both areas directly from the Main Reef WRD once that area has been reclaimed. Overview of Store Reef WRD and Store Reef Slimes Dam is shown in Figure 8. Store Reef Slimes Dam and WRD are partially within 100m of a non-perennial stream / drainage line.





Figure 8: Store Reef Slimes Dam Footprint (Left) and WRD (right)

Contiguous with the aforementioned areas lies the Waste Rock #1, Little Kent & Kidson Slimes Dams (Figure 9), Old Fairview Plant and Fairview Top Slimes Dam (Figure 10 to Figure 12). All of these are within 100m of the aforementioned drainage line.

Two silos are the only visible remains of the Old Fairview Plant. As part of the EIA Process, an archaeologist will investigate the area in more detail before any inadvertent damage is done to this structure, as it is older than 60 years and therefore automatically protected in terms of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA).







Figure 9: Waste Rock #1 (Left) and Little Kent & Kidson Slimes Dams (right)





Figure 10: Remains of the Fairview Plant (Left) and the affected drainage line (right)

Note from Figure 10 that Tailings material is visible in the drainage line in the photograph on the right.





Figure 11: Waste Rock and Tailings material in and adjacent to the drainage line at and downstream of the Old Fairview Plant





Figure 12: Fairview Top Slimes Dam

House Reef WRD (Figure 13) is isolated from the previously mentioned dumps. There is an existing road that travels within 300m from the Dump location, but this road is in poor condition and at times impassable. The road will have to be upgraded. Wagon Road WRD is located approximately 750 metres directly east (linear distance) of the existing Crusher Plant and #11 Adit at Fairview Mine. The extremely steep terrain necessitates travelling a distance over 3km to reach the Dump. There is an existing road to the Wagon Road WRD which will be used, however the road will require to be upgraded in places.





Figure 13: House Reef WRD (Left) and typical access roads within the MRA (Right)

## 2.4.3 Site access

Road access to the Fairview mine is via the existing Provincial Road D2195. The access road is tarred.

Internal vehicle movement at Fairview Mine is via a series of paved and unpaved roads. The roads at the main infrastructure areas are mostly tarred, only minor roads are gravel.

Access to the historic dumps in the eastern portion of the MRA is via various routes and tracks, mostly dirt tracks. Some of these have recently been upgraded by the Mine to facilitate access



to these portions of the MRA. The majority of these tracks are considered pre-existing, but will need to be upgraded to facilitate the proposed reclamation.

There is an aerial ropeway to transport mined and crushed material from the crushing and milling plants at No. 11 Adit to the Mineral Processing Plant. The aerial ropeway extends approximately 4 kilometres (Van Der Merwe, August 2010).

#### 2.4.4 Services

The proposed Project will require a number of services in addition to those that can be shared with the existing Fairview Mine. These relate to the provision of potable and process water, power, sewage and waste management services.

#### 2.4.4.1 Power supply

Eskom supplies power to the Fairview Mine, the Barberton Sub-station is currently being used for electricity supply. From the sub-station, electricity is supplied to the mine by means of 11 kV overhead powerlines. Generator sets are available on surface to provide electricity to essential systems during electricity outages (Van Der Merwe, August 2010).

The proposed project will require power to pump slurry from the processing plant to the proposed new TSF – it is anticipated that the existing electricity supply at Fairview Mine will be sufficient to accommodate the Project. No electricity supply is needed to reclaim the historic dumps as reclamation will be mechanical using diesel-driven equipment.

#### 2.4.4.2 Potable water

Potable Water is currently abstracted from two on-site boreholes, the Hyslops Creek and the Suidkaap River. Water from the boreholes is stored at the Mine Village potable supply tanks, from where overflow reports to the administration potable water supply tank, and the processing plant. Water pumped from the rivers is first treated at the Mine's purification plant prior to supplying the plant and administration potable water supply tank (Van Der Merwe, August 2010).

The proposed project will not result in a significant increase in the number of employees at Fairview Mine and it is anticipated that potable water demand will be met by these existing sources of potable water.

#### 2.4.4.3 Process Water

Water found in underground workings is pumped to surface at the No. 11 Adit and piped to the process water tank at the Mineral Processing Plant. Water from the processing plant is reused, and water reporting to the RWD at the existing TSFs is also pumped back to the plant as needed.

The plant does not have the capacity to use all water encountered in the underground workings, and the excess water pumped to surface at the No. 11 Adit is at times pumped into the Olifantskloof Creek. The workshop dams also overflow into the Olifantskloof Creek at times when not all the water can be used in the process (Van Der Merwe, August 2010).

The water balance will be updated as part of the EIA Process and associated specialist studies.



#### 2.4.4.4 Sewage

All sewage produced at the village, hostel and plant is piped to and managed at the municipal sewage treatment works in Barberton. There are no sewage treatment facilities at Fairview mine (Van Der Merwe, August 2010).

Sewage generated at the historic dump reclamation sites will be managed by portable chemical toilets to be serviced by a subcontractor.

The proposed new TSF is located close enough to existing infrastructure areas that sewage generated here can tie in with the existing sewage management at Fairview Mine.

#### 2.4.5 Waste Management

Waste streams that will be generated at the Project include sewage waste (discussed above), general domestic waste, hazardous waste and mineral waste.

#### 2.4.5.1 General Waste

General waste generated during the operation of the mine is currently disposed at a waste disposal facility located south of the Bramber tailings facility and the Olifantskloof Creek. General waste is separated at the waste site and recycled where possible. General waste originates from the Fairview Village, Fairview Hostel, offices and mining operations (Van Der Merwe, August 2010).

The proposed project will not generate significant additional quantities of general waste (mostly domestic waste generated by employees), and general waste that is generated will be able to feed into the existing general waste stream.

It is recommended that Fairview Mine upgrade their waste storage and management facility to appropriate design standards.

#### 2.4.5.2 Hazardous Waste

Hazardous waste generated at the mine is temporarily stored on site before being collected by a waste management contractor for disposal off-site at a licenced hazardous waste disposal facility.

The hazardous waste storage facilities are concrete bunded and roofed areas.

Hazardous waste generated at the mine is minimal, empty containers for chemicals used by the plants are kept at the chemical storage and returned to the suppliers.

Medical waste is disposed at the local hospital and incinerated.

The waste stored on site includes workshop waste (such as used oil and lubricants, hydrocarbon contaminated rags, used oil filters etc.), fluorescent tubes, tins that have contained hazardous material (returned to suppliers), certain paints, solvents (empty tins are removed by a contractor) and batteries (returned to suppliers). Used oils are collected and removed from site by a waste oil recycling contractor (Van Der Merwe, August 2010).

The proposed project will contribute to the generation of hazardous waste, but in negligible quantities. This should feed into the Mine's existing waste management systems.



The Mine must keep records of hazardous waste generated and legally disposed of, and register as a Hazardous Waste Generator in terms of NEMWA.

In addition, it is expected that the tailings generated by the Processing Plant will also be regarded as hazardous waste and the Cyanide Tailings Code will have to be followed. This will apply to the proposed new Fairview TSF as well.

#### 2.4.6 Stormwater Management

A stormwater management plan (SWMP) will be designed for the site as part of the EIA in accordance with the requirements of GN704 (Regulations on Use of Water for Mining and Related Activities Aimed at the Protection of Water Resources).

It must however be noted that the Bramber TSF (now reclaimed and the site of the proposed new Fairview TSF) is within 100 metres of the creek to the South, and a number of the historic dumps were established within, or very close, to watercourses. Exemption from certain provisions of GN704 will therefore have to be obtained for the project to continue.

#### 2.4.7 Emissions

Other than the existing processing plant, increased emissions may be expected in the form of emissions and dust from vehicle movement on unpaved roads, construction activities, reclamation activities and the new TSF.

Gaseous emissions from vehicle and machinery operation during the construction and operational phases of the project can be expected but are not expected to be significant in the context of the existing and proposed mining and processing operations.

An air quality impact assessment (AQIA), which will include a comprehensive emissions inventory, has been commissioned as part of the EIA Process.

#### 2.4.8 Security, fencing and access control

Fencing is provided along the Kaapmuiden road. Internal security fencing is also in place at the Mineral Processing Plant.

The mine has also installed advanced surveillance and Closed-Circuit Television systems at the Mineral Processing Plants. Guard dogs are also provided to patrol the perimeter of this area.

The Fairview Mine is not fenced on the mining right perimeter, as the area is too large and inaccessible, and affected by the BNR. Illegal mining from old adits throughout the MRA is a challenge.

Security personnel are employed in an attempt to prevent people from accessing historic workings.

The proposed new TSF will be fenced and access controlled. The sites of the proposed reclamation activities will most likely not be fenced, however, it is anticipated that the proposed reclamation of these dumps will at least also prevent illegal miners from attempting to reclaim gold from these facilities.



## 2.4.9 Administration, workshops and other buildings

Existing administration buildings associated with the Fairview Mine are located in the Main infrastructure area east of the Kaapmuiden Road. There are also administration buildings at the No. 11 Adit area.

Several workshops (engineering and mechanical) and warehouses (equipment and maintenance parts) are also located at the Main infrastructure area and at No. 11 Adit.

There are two housing facilities at Fairview Mine – the Fairview Village and Fairview Hostel, consisting of 66 married quarters and approximately 155 Hostel rooms respectively. Residents of these facilities are employed by the Mine.

Fuel storage facilities are located at the Plant and at No. 11 Adit. Tanks are underground storage tanks with a cumulative capacity of 45,500 litres (45.5m³). There are also mobile diesel storage facilities at the Underground Mining Areas.

The proposed project will not directly affect any of the existing administration, workshops or accommodation facilities but will use the existing facilities.

#### 2.4.10 Employment

According to the approved EMP (Van Der Merwe, August 2010), approximately 1,871 direct, indirect and induced job opportunities will arise from the entire Barberton Mine's company activities at Fairview, Sheba and New Consort. Of this amount, almost 77% is a direct result of the mining activities at the Mine. The remaining 23% is related to the indirect and induced impacts associated with the mining activities.

The proposed Project will not contribute significantly to job creation but rather focus on the retention of jobs by prolonging the Life of Mine (LoM) through the reclamation activities and enabling continued production by ensuring sufficient tailings disposal capacity exists.

Construction phase employment opportunities associated with the construction of the new TSF may be associated with the generation of new employment opportunities.

### 2.4.11 Operating hours

Fairview Mine operates two shifts per day on a five-day production work week. The plant is operational for three shifts per day, 7 days a week (24 hours a day).

The proposed reclamation activities will be operational as the Mining shifts are. No reclamation activities can be undertaken at night-time.

Construction will also be limited to daylight hours. Once operational, the proposed new TSF will be able to receive tailings 24 hours per day, seven days per week.

## 2.5 Listed Activities being applied for

The Listed Activities in terms of the NEMA EIA Regulations 2014 (as amended) pertaining to the proposed Project are summarised in the Tables in Sections 2.5.1 to 2.5.3.

Waste Management Activities are detailed in section 2.5.4



# 2.5.1 Listed Activities identified in Listing Notice 1 GN R 983 (as amended)

| Listing Notice                            | Activity<br>Number | Activity Description  | Relevance to the Project  |  |
|---|--------------------|---|---|--|
| GN R 983 (as amended)<br>Listing Notice 1 | 9                  | The development of infrastructure exceeding 1 000 metres in length for the bulk transportation of water or storm water—  (i) with an internal diameter of 0,36 metres or more; or  (ii) with a peak throughput of 120 litres per second or more; excluding where— (a) such infrastructure is for bulk transportation of water or storm water or storm water drainage inside a road reserve or railway line reserve; or (b) where such development will occur within an urban area.              | It is possible that stormwater management infrastructure at the site of the new TSF will meet these thresholds and thus the activity is included in the Application.  |  |
| GN R 983 (as amended)<br>Listing Notice 1 | 10                 | The development and related operation of infrastructure exceeding 1 000 metres in length for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes –  (i) with an internal diameter of 0,36 metres or more; or  (ii) with a peak throughput of 120 litres per second or more; excluding where— (a) such infrastructure is for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial | It is possible that tailings reticulation infrastructure associated with the new TSF will meet these thresholds and thus the activity is included in the Application. |  |



| Listing Notice                            | Activity<br>Number | Activity Description  | Relevance to the Project   |
|---|--------------------|---|--|
|   |                    | discharge or slimes inside a road reserve or railway line reserve; or (b) where such development will occur within an urban area.   |  |
| GN R 983 (as amended)<br>Listing Notice 1 | 19                 | The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse; but excluding where such infilling, depositing, dredging, excavation, removal or moving—  (i) will occur behind a development setback;  (ii) is for maintenance purposes undertaken in accordance with a maintenance management plan;  (iii) falls within the ambit of activity 21 in this Notice, in which case that activity applies;  (iv) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or  (v) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies. | This activity is relevant to the proposed reclamation of historic dumps, and potentially to the establishment of access roads to and from these dumps. As the dumps were established prior to the MPRDA being in effect, there is legal precedent that the reclamation does not require MPRDA authorisation and therefore Activity 21 does not apply, even though the dumps fall within the existing Fairview MRA. |
| GN R 983 (as amended)Listing Notice 1     | 21                 | Any activity including the operation of that activity which requires a mining permit in terms of section 27 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002),  | Fairview Mine has an existing Mining Right and does not require a new Mining Permit.   |



| Listing Notice                            | Activity<br>Number | Activity Description   | Relevance to the Project   |  |
|---|--------------------|--|--|--|
|   |                    | including —(a) associated infrastructure, structures and earthworks, directly related to the extraction of a mineral resource; or (b) the primary processing of a mineral resource including winning, extraction, classifying, concentrating, crushing, screening or washing; but excluding the secondary processing of a mineral resource, including the smelting, beneficiation, reduction, refining, calcining or gasification of the mineral resource in which case activity 6 in Listing Notice 2 applies.                                    |  |  |
| GN R 983 (as amended)<br>Listing Notice 1 | 24                 | The development of a road—  (i) for which an environmental authorisation was obtained for the route determination in terms of activity 5 in Government Notice 387 of 2006 or activity 18 in Government Notice 545 of 2010; or  (ii) with a reserve wider than 13,5 metres, or where no reserve exists where the road is wider than 8 metres;  but excluding a road— (a) which is identified and included in activity 27 in Listing Notice 2 of 2014; (b) where the entire road falls within an urban area; or (c) which is 1 kilometre or shorter. | Collectively, road upgrades required to access the historic dumps will exceed 1km in length and these roads may have to be wider than 8m in places. The road developments follow paths of previously used roads and may be seen as upgrades to existing roads in most locations, however since these roads have been in disuse for an extended period of time, it may be argued that, even though previously established routes are followed, the roads will have to be newly constructed in places. |  |
| GN R 983 (as amended) Listing Notice 1    | 27                 | The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for—   | There is practically no indigenous vegetation remaining at the site of the TSF, except for the area between the reclaimed Bramber footprint and the existing New Bramber / BTRP TSF. Collectively, the   |  |



| Listing Notice        | Activity<br>Number | Activity Description   | Relevance to the Project   |
|-----------------------|--------------------|--|--|
|                       |                    | (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan.  | dumps targeted for reclamation comprise a footprint of 20.22 Hectares. Coupled with road development and vegetation clearance for the Fairview TSF, it is anticipated that vegetation removal will exceed 20 Hectares.   |
|                       |                    |  | Indigenous vegetation is defined as "vegetation consisting of indigenous plant species occurring naturally in an area, regardless of the level of alien infestation and where the topsoil has not been lawfully disturbed during the preceding ten years". Vegetation that has established on the historic dumps is not regarded as indigenous vegetation, as the presence of topsoil is questioned. This will however be confirmed by the specialist soil study during the EIA phase. |
| GN R 983 (as amended) | 34                 | The expansion of existing facilities or infrastructure for any process or activity where such expansion will result in the need for a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the release of emissions, effluent or pollution, excluding— | The proposed project is not regarded as an expansion of the Fairview Mine, but rather relates to re-use of previous TSF sites that have been reclaimed, for the establishment of a new TSF, to facilitate continuation of processing activities.   |
| Listing Notice 1      |                    | (i) where the facility, infrastructure, process or activity is included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National  | The development of the proposed new TSF will require a WML and the stipulated exclusion therefore applies.   |



| Listing Notice                            | ting Notice Activity Number Activity Description |   | Relevance to the Project   |  |
|---|--|---|--|--|
|   |  | Environmental Management: Waste Act, 2008 applies;  (ii) the expansion of existing facilities or infrastructure for the treatment of effluent, wastewater, polluted water or sewage where the capacity will be increased by less than 15 000 cubic metres per day; or  (iii) the expansion is directly related to aquaculture facilities or infrastructure where the wastewater discharge capacity will be increased by 50 cubic metres or less per day.  |  |  |
| GN R 983 (as amended)<br>Listing Notice 1 | 45   | The expansion of infrastructure for the bulk transportation of water or storm water where the existing infrastructure—  (i) has an internal diameter of 0,36 metres or more; or  (ii) has a peak throughput of 120 litres per second or more; and (a) where the facility or infrastructure is expanded by more than 1 000 metres in length; or (b) where the throughput capacity of the facility or infrastructure will be increased by 10% or more; excluding where such expansion— (aa) relates to transportation of water or storm water within a road reserve or railway line reserve; or (bb) will occur within an urban area. | Existing infrastructure at Fairview Mine meets these thresholds and the proposed new infrastructure at the proposed new TSF will likely also meet these thresholds (though detail design is still underway). It may be argued that the establishment of infrastructure related to the Project is an expansion of the current infrastructure of the Fairview Mine, as the Project falls within the existing Fairview MRA. |  |



| Listing Notice                            | Activity<br>Number | Activity Description   | Relevance to the Project   |
|---|--------------------|--|--|
| GN R 983 (as amended)Listing<br>Notice 1  | 46                 | The expansion and related operation of infrastructure for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes where the existing infrastructure—  (i) has an internal diameter of 0,36 metres or more; or  (ii) has a peak throughput of 120 litres per second or more; and (a) where the facility or infrastructure is expanded by more than 1 000 metres in length; or (b) where the throughput capacity of the facility or infrastructure will be increased by 10% or more; excluding where such expansion— (aa) relates to the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes within a road reserve or railway line reserve; or (bb) will occur within an urban area. | Existing infrastructure at Fairview Mine meets these thresholds and the proposed new infrastructure at the proposed new TSF will likely also meet these thresholds (though detail design is still underway). It may be argued that the establishment of infrastructure related to the Project is an expansion of the current infrastructure of the Fairview Mine, as the Project falls within the existing Fairview MRA. |
| GN R 983 (as amended)<br>Listing Notice 1 | 56                 | The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre—  (i) where the existing reserve is wider than 13,5 metres; or  (ii) where no reserve exists, where the existing road is wider than 8 metres; excluding where widening or lengthening occur inside urban areas   | None of the existing tracks used to access the historic dumps within the MRA are wider than 8 metres and the exclusion therefore applies.  |



# 2.5.2 Listed Activities identified in Listing Notice 2 GN R 984 (as amended)

| Listing Notice                            | Activity<br>Number | Activity Description   | Relevance to the Project   |
|---|--------------------|--|--|
| GN R 984 (as amended)<br>Listing Notice 2 | 6                  | The development of facilities or infrastructure for any process or activity which requires a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent, excluding—  (i) activities which are identified and included in Listing Notice 1 of 2014;  (ii) activities which are included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies;  (iii) the development of facilities or infrastructure for the treatment of effluent, polluted water, wastewater or sewage where such facilities have a daily throughput capacity of 2 000 cubic metres or less; or  (iv) where the development is directly related to aquaculture facilities or infrastructure where the wastewater discharge capacity will not exceed 50 cubic metres per day. | The proposed new TSF will require a license in terms of the NEMWA, but will also require licensing in terms of Section 21(g) of the NWA, which governs the generation and release of polluted water and effluent. This activity is therefore regarded as relevant. |



| Listing Notice                               | Activity<br>Number | Activity Description  | Relevance to the Project  |  |
|--|--------------------|---|---|--|
| GN R 984 (as amended)<br>Listing Notice 2    | 7                  | The development and related operation of facilities or infrastructure for the bulk transportation of dangerous goods—  (i) in gas form, outside an industrial complex, using pipelines, exceeding 1 000 metres in length, with a throughput capacity of more than 700 tons per day;  (ii) in liquid form, outside an industrial complex, using pipelines, exceeding 1 000 metres in length, with a throughput capacity of more than 50 cubic metres per day; or  (iii) in solid form, outside an industrial complex, using funiculars or conveyors with a throughput capacity of more than 50 tons per day.   | The transport of dangerous goods within the Fairview Plant will not trigger this activity, as it is regarded as an industrial complex. Pumping of tailings to the proposed new TSF may trigger this activity, though detail of the pipes to transport slurry to the TSF is still underway. It is unlikely that pipelines between the Processing plant at Fairview and the proposed new TSF will exceed 1000 metres in length. |  |
| GN R 984 (as<br>amended)<br>Listing Notice 2 | 15                 | The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for—  (i) the undertaking of a linear activity; or  (ii) maintenance purposes undertaken in accordance with a maintenance management plan.  Vegetation clearance in preparation reclamation of dumps and establishment reclamation |   |  |
| GN R 984 (as amended) Listing Notice 2       | 17                 | Any activity including the operation of that activity which requires a mining right as contemplated in section 22 of the Mineral and Petroleum Resources  | The proposed Project is within the existing Fairview Mining Right Area, and therefore requires amendment of the existing right in terms of Section  |  |



| Listing Notice                           | Activity Number Activity Description |   | Relevance to the Project   |
|--|--------------------------------------|---|--|
|  |                                      | Development Act, 2002 (Act No. 28 of 2002), including—  | 102 of the MPRDA, and not a new Mining Right in terms of Section 22 of the MPRDA.  |
|  |                                      | (a) associated infrastructure, structures and earthworks, directly related to the extraction of a mineral resource; or  | The existing and authorized mineral processing facilities at Fairview Mine will be used to process reclaimed material. Tailings from the existing plant  |
|  |                                      | (b) the primary processing of a mineral resource including winning, extraction, classifying, concentrating, crushing, screening or washing;   | will be deposited on the proposed new TSF.   |
|  |                                      | but excluding the secondary processing of a mineral resource, including the smelting, beneficiation, reduction, refining, calcining or gasification of the mineral resource in which case activity 6 in this Notice applies.  |  |
| GN R 984 (as amended)Listing<br>Notice 2 | 19                                   | The removal and disposal of minerals contemplated in terms of section 20 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), including—  (a) associated infrastructure, structures and earthworks, directly related to prospecting of a mineral resource; or  (b) the primary processing of a mineral resource including winning, extraction, classifying, concentrating, crushing, screening or washing; but excluding the secondary processing of a mineral resource, including the smelting, beneficiation, reduction, refining, calcining or gasification of the | This activity may be relevant to future prospecting and bulk sampling activities at Fairview Mine and is included in the List of Activities being applied for as part of this Project, as the proponent may wish to further investigate other historical waste dumps and potentially extract bulk samples from these dumps to confirm whether these can be economically reclaimed. |



| Listing Notice                         | Activity<br>Number | Activity Description   | Relevance to the Project  |
|--|--------------------|--|---|
|  |                    | mineral resource in which case activity 6 in this Notice applies.  |   |
| GN R 984 (as amended) Listing Notice 2 | 24                 | The extraction or removal of peat or peat soils, including the disturbance of vegetation or soils in anticipation of the extraction or removal of peat or peat soils, but excluding where such extraction or removal is for the rehabilitation of wetlands in accordance with a maintenance management plan. | A specialist soil study has been commissioned as part of the EIA, and the presence of peat soils associated with the non-perennial drainage lines affected by the historic dumps will have to be confirmed. If the drainages are associated with Peat soils, this activity will apply, but this is considered unlikely. |



# 2.5.3 Listed Activities identified in Listing Notice 3 GN R 985 (as amended)

| Listing Notice                            | Activity<br>Number | Activity Description   | Mpumalanga  | Relevance to the Project   |
|---|--------------------|--|---|--|
| GN R 985 (as amended)<br>Listing Notice 3 | 4                  | The development of a road wider than 4 metres with a reserve less than 13,5 metres | i. Outside urban areas: (aa) A protected area identified in terms of NEMPAA, excluding disturbed areas; (bb) National Protected Area Expansion Strategy Focus areas; (cc) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; (dd) Sites or areas identified in terms of an international convention; (ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (ff) Core areas in biosphere reserves; or (gg) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core areas of a biosphere reserve, excluding disturbed areas, where such areas comprise | Roads required to access the historic dumps and reclaim this material will likely exceed 4 metres in width at places. Due to the long-term disuse of the previous tracks, it may be argued that the proponent will have to construct new roads on the footprints of the old tracks, rather than simply upgrading existing roads.  The dumps targeted for reclamation are located within the proclaimed boundaries of the Barberton Nature Reserve. It is important to note that the Fairview Mine obtained approval prior to the establishment of the BNR along these current boundaries.  The Fairview MRA is also adjacent to a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site. |



| Listing Notice                              | Activity<br>Number | Activity Description   | Mpumalanga  | Relevance to the Project   |
|---|--------------------|--|---|--|
|   |                    |  | indigenous vegetation; or ii. Inside urban areas: (aa) Areas zoned for use as public open space; or (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose.  |  |
| GN R 985 (as<br>amended)Listing<br>Notice 3 | 12                 | The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposesundertaken in accordance with a maintenance management plan. | i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004; ii. Within critical biodiversity areas identified in bioregional plans; or iii. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning or proclamation in terms of NEMPAA. | The implementation of the project will definitely require the clearance of more than 300m² of vegetation, which includes areas identified as CBAs. Specialist studies during the EIA Phase will confirm whether this constitutes "indigenous vegetation". Furthermore, the site of the proposed reclamation falls within the BNR proclaimed boundary, even though the Mining Right was approved and valid prior to the promulgation of the BNR along these boundaries. |



| Listing Notice                            | Activity<br>Number | Activity Description   | Mpumalanga   | Relevance to the Project  |
|---|--------------------|--|--|---|
| GN R 985 (as amended)<br>Listing Notice 3 | 18                 | The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre. | i. Outside urban areas: (aa) A protected area identified in terms of NEMPAA, excluding conservancies; (bb) National Protected Area Expansion Strategy Focus areas; (cc) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority; (dd) Sites or areas identified in terms of an international convention; (ee) Critical biodiversity areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans; (ff) Core areas in biosphere reserves; (gg) Areas within 10 kilometres from national parks or world heritage sites or 5 kilometres from any other protected area identified in terms of NEMPAA or from the core area of a biosphere reserve, where such areas comprise indigenous vegetation; or | The roads that will be required to access the dumps that are targeted for reclamation generally align with old tracks. The re-establishment / upgrade of these roads could therefore be regarded as alterations to existing roads. It is likely that the proposed access roads will need to be over 4m wide in places.  As the dumps are located within the BNR proclaimed boundary, this activity may apply. |



| Listing Notice | tivity<br>mber A | Activity Description | Mpumalanga   | Relevance to the Project |
|----------------|------------------|----------------------|--|--------------------------|
|                |                  |                      | ii. Inside urban areas: (aa) Areas zoned for use as public open space; or (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or zoned for a conservation purpose. |                          |

# 2.5.4 Listed Waste Management Activities in terms of NEMWA (GN 921)

| NEMWA<br>Category | Activity<br>Number | Activity Description   | Relevance to the Project   |
|-------------------|--------------------|--|--|
| Category<br>B     | 11                 | The establishment or reclamation of a residue stockpile or residue deposit resulting from activities which require a mining right, exploration right or production right in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002). | The original Bramber TSF (where the new Fairview TSF is proposed) is approved in terms of the Fairview EMP. However, the TSF has been reclaimed to ground-level and it is considered that the Project does not merely involve the re-establishment of the old TSF, but rather the design, construction and operation of a new facility, albeit on the previous TSF footprint.  The proposed Fairview TSF will therefore require authorization in terms of the NEMWA.  It is posited that reclamation of processed material that was deposited onto BML dumps prior to the commencement of the MPRDA (i.e. 1 May 2004), does not constitute a waste management activity, as these dumps did not result from activities which required any rights in terms of the MPRDA.  It can therefore be argued that the reclamation of the historic dumps does not constitute a Listed Activity in terms of NEMWA. |



| NEMWA<br>Category | Activity<br>Number | Activity Description   | Relevance to the Project   |  |
|-------------------|--------------------|--|--|--|
| Category<br>B     | 7                  | The disposal of any quantity of hazardous waste to land  | The Tailings generated at Fairview, that will be disposed of at the propose Fairview TSF, is categorized as Hazardous Waste in terms of the NEMWA. |  |
| Category<br>B     | 10                 | The construction of a facility for a waste management activity listed in Category B of this Schedule (not in isolation to associated waste management activity). | Construction of the Fairview TSF will trigger this Activity  |  |



# 3 Policy and Legislative Context

Section 24 of the Constitution of the Republic of South Africa states that:

Everyone has the right to (a) an environment that is not harmful to their health or well-being; and (b) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that –

- Prevent pollution and ecological degradation;
- Promote conservation; and
- Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

To give effect to Section 24 of the Constitution, several laws have been promulgated towards realisation of these rights, which broadly speaking relates to:

- Development and Use of Resources (in this case, mining);
- Environmental Management; and
- Conservation and Protected Areas.

This section describes the key legislation, policies, plans, guidelines and development planning frameworks and tools and their relevance to the Fairview Mine and proposed projects.

# 3.1 Legislation specific to mining

By 1980, mining's contribution to the country's total economic production peaked at 21%, meaning that for every R100 that the South African economy produced, R21 was due to mining. In 1987, employment in the industry peaked at just over 760,000 people (Stats SA, 2015). Mining production decreased by 5,2% year-on-year in July 2018, with gold being the largest negative contributor (http://www.statssa.gov.za/? Page\_id=1856&PPN=P2041&SCH=7255).

The rights to search for and exploit Minerals in South Africa have been guided by changing laws and principles throughout the country's history. Originally it was accepted that the owner of land would be allowed to exploit the minerals on his land, however the government saw the benefits in reserving rights to mine, or control mining through the issuing of permits, especially for precious stones and gold. The intention of many of the past mining laws, was to ensure that the development of mineral deposits (especially oil, precious stones and precious metals) could not be prevented by private land owners (who were previously the holders of the mineral rights). Many of the previous mining laws were consolidated between 1964 to 1967, resulting in a reservation of certain mineral rights (generally precious metals and natural oil) on certain types of land occurring in favour of the State, primarily through the Mining Rights Act, 20 of 1967. The Minerals Act, 1991 (Act No. 50 of 1991) simplified the law on mineral exploitation by doing away with the differentiation between different classes of land and minerals, and recognising the common law rights of landowners in relation to mining (van der Schyff, 2012).

Then, after South Africa became a democracy in 1994, the Minerals and Petroleum Resources Development Act, 2002 (MPRDA) (Act No. 28 of 2002) moved away from the preceding provisions in an attempt to advance the mining industry in an equitable manner.

The laws and regulations that are relevant to mining of gold in South Africa at present are briefly discussed below.



#### 3.1.1 Minerals and Petroleum Resources Development Act, 2002 (MPRDA)

The Minerals and Petroleum Resources Development Act, 2002 (MPRDA) (Act No. 28 of 2002) and its Regulations (GNR527, 23 April 2004 as amended by: GNR R1288 dated 29 October 2004; GNR1203 dated 30 November 2006; and GNR349 dated 18 April 2011) is the predominant legislation dealing with the acquisition of rights to search for, extract and process mineral resources in South Africa. The MPRDA came into effect on 1 May 2004. The MPRDA holds that mineral resources in South Africa belong to the nation and that the State is the custodian thereof.

#### 3.1.1.1 Applications for Mining Rights

Any person may apply for a mining right by following the application procedure set out in the MPRDA and administrated by the Department of Mineral Resources (DMR). Applications for rights must be accepted if the application requirements are met, and if no other person holds a prospecting right, mining right, mining permit or retention permit for the same mineral on the same land. Once the DMR accepts an application, the DMR will notify the applicant to conduct an Environmental Impact Assessment (EIA), and submit an Environmental Management Programme (EMP, also called an Environmental Management Plan) to the DMR for consideration. The DMR will further instruct the applicant to consult with Interested and Affected Parties (I&APs).

In general terms, the Minister must grant a mining right if—

- a. the mineral can be mined optimally in accordance with the mining work programme;
- b. the applicant has access to financial resources and has the technical ability to conduct the proposed mining operation optimally;
- c. the financing plan is compatible with the intended mining operation and the duration thereof;
- d. the mining will not result in unacceptable pollution, ecological degradation or damage to the environment;
- e. the applicant has provided financially and otherwise for the prescribed social and labour plan;
- f. the applicant has the ability to comply with the relevant provisions of the Mine Health and Safety Act, 1996 (Act No. 29 of 1996);
- g. the applicant is not in contravention of any provision of this Act; and
- h. the granting of such right will further the objects referred to in section 2(d) and  $(f)^2$  and in accordance with the charter contemplated in section 100 and the prescribed social and labour plan.

The application to which this report relates includes an application to include the surface rights currently held by BML, and on which mining-related infrastructure has already been approved and established, into the existing and approved Fairview Mining Right (MP/30/5/1/2/2/191 MR).

<sup>&</sup>lt;sup>2</sup> Section 2(d)"and (f): The objects of this Act are to— (d) substantially and meaningfully expand opportunities for historically disadvantaged persons, including women, to enter the mineral and petroleum industries and to benefit from the exploitation of the nation's mineral and petroleum resources; (f) promote employment and advance the social and economic welfare of all South Africans.



As part of this application, BML is applying for Listed Activities in terms of the NEMA, to recover historically dumped material from the historic dumps on the surface of their MRA.

#### 3.1.1.2 Application of the MPRDA to historic dumps

Section 1 of the MPRDA contains the following definitions that are relevant when considering the proposed reclamation projects at Fairview:

- 1) "mine" means, when—
  - (a) used as a noun—
    - (i) any excavation in the earth, including any portion under the sea or under other water **or in any residue deposit**, as well as any borehole, whether being worked or not, made for the purpose of searching for or winning a mineral;
    - (ii) any other place where a mineral resource is being extracted, including the mining area and all buildings, structures, machinery, **residue stockpiles**, **access roads** or objects situated on such area and which are used or intended to be used in connection with such searching, winning or extraction or processing of such mineral resource; and
  - (b) used as a verb, in the mining of any mineral, in or under the earth, water or any **residue deposit**, whether by underground or open working or otherwise and includes any operation or activity incidental thereto, in, on or under the relevant mining area;
- 2) "mineral" means any substance, whether in solid, liquid or gaseous form, occurring naturally in or on the earth or in or under water and which was formed by or subjected to a geological process, and includes sand, stone, rock, gravel, clay, soil and any mineral occurring in residue stockpiles or in residue deposits;
- 3) "**residue deposit**" means any residue stockpile remaining at the termination, cancellation or expiry of a prospecting right, mining right, mining permit, exploration right, production right or an old order right;
- 4) "residue stockpile" means any debris, discard, tailings, slimes, screening, slurry, waste rock, foundry sand, beneficiation plant waste, ash or any other product derived from or incidental to a mining operation and which is stockpiled, stored or accumulated for potential re-use, or which is disposed of, by the holder of a mining right, mining permit, production right or an old order right;

The MPRDA regulates residue stockpiles and deposits as defined in Section 1 of the Act and provided above. The essential difference between a residue stockpile and a residue deposit as provided in the MPRDA, is that a residue stockpile exists during the validity period and up until the cancellation or expiry of rights issued in terms of the MPRDA, while a residue stockpile becomes a residue deposit upon expiry or cancellation of such rights.

The notion of "old order rights" was only introduced into law by the commencement of the MPRDA on 1 May 2004. Therefore, it is concluded that only residues produced in terms of rights granted under the MPRDA can be defined as residue stockpiles or residue deposits.

As the dumps being considered for reclamation at Fairview were established long before 2004 (in the time period spanning approximately 1890 to 2000), these do not constitute residue



stockpiles as defined in the MPRDA, and the gold that may still be recovered from these dumps do not constitute "minerals" as defined in the MPRDA. The historic dumps are therefore not subject to the provisions of the MPRDA and permits or rights in terms of the MPRDA are not required to reclaim these dumps, though they are located within the approved MRA.

The case law precedent for this conclusion was affirmed by the High Court of South Africa in the following matters:

- De Beers Consolidated Mines Limited v Ataqua Mining (Pty) Ltd and others (Case No 3215/06); and
- Realeboga Bosaletse NO and others v the Minister of Mineral Resources and others (Case No 1891/13).

Following the abovementioned cases and others, it has become well accepted in South African law that once a mineral is extracted, it becomes the movable property of the person who extracted it (Geldenhuys, 2014). The person(s) who extracted the material that constitute the historical dumps targeted for reclamation are not known and have abandoned the site. Presently BML holds Mineral Rights over their MRA while the MTPA is the custodian of the surface rights.

#### 3.1.1.3 Rights and obligations of the Holder of a Mining Right

Section 25 of the MPRDA pertains to the rights and obligations of the Holder of a Mining Right (such as Barberton Mines Pty Ltd). Section 5 of the MPRDA states that:

- (1) A prospecting right, mining right, exploration right or production right granted in terms of this Act and registered in terms of the Mining Titles Registration Act, 1967 (Act No. 16 of 1967), is a limited real right in respect of the mineral or petroleum and the land to which such right relates.
- (2) The holder of a prospecting right, mining right, exploration right or production right is entitled to the rights referred to in this section and such other rights as may be granted to, acquired by or conferred upon such holder under this Act or any other law.
- (3) Subject to this Act, any holder of a prospecting right, a mining right, exploration right or production right may:
  - a. enter the land to which such right relates together with his or her employees, and bring onto that land any plant, machinery or equipment and build, construct or lay down any surface, underground or under sea infrastructure which may be required for the purpose of prospecting, mining, exploration or production, as the case may be;
  - b. prospect, mine, explore or produce, as the case may be, for his or her own account on or under that land for the mineral or petroleum for which such right has been granted;
  - c. remove and dispose of any such mineral found during the course of prospecting, mining, exploration or production, as the case may be;

Section 25 therefore seems to imply that Barberton Mines has the right to prospect for and mine gold within their MRA (including the Fairview, Sheba and New Consort MRAs).



The MPRDA further states that nobody may mine without environmental authorisation (Section 5A) and (Section 48(1)), that a mining right may not be granted "on any land being used for public or government purposes or reserved in terms of any other law". In this context it is important to note that the Applicant is the Holder of an Existing Mining Right, which was granted prior to the Proclamation of the Barberton Nature Reserve as a protected area. The land is therefore not regarded as being "reserved in terms of any other law" particularly the NEMPAA, as the land was lawfully reserved for mining prior to the Promulgation of the NEMPAA and prior to the promulgation of the BNR along its current boundaries.

### 3.1.1.4 Amendment of Mining Rights

The existing and approved EMP relevant to the Fairview Mining Right (Van Der Merwe, August 2010) pertains to underground mining and hydraulic reclamation of surface tailings facilities, in addition to the associated processing and waste handling activities.

Section 102 of the MPRDA states that

A reconnaissance permission, prospecting right, **mining right**, mining permit, retention permit, technical corporation permit, reconnaissance permit, exploration right and production right work programme; mining work programme, **environmental management programme**, **and environmental management plan** may not be amended or varied (including by extension of the area covered by it or by the addition of minerals or a share or shares or seams, mineralised bodies, or strata, which are not at the time the subject thereof) without the written consent of the Minister.

Barberton Mines therefore have to apply to the Minister of Mineral Resources for consent to:

- incorporate the Fairview Surface rights areas where the existing TSFs are located and ensure the activities occurring at the Fairview Mine are all integrated under one Right, and managed under one EMP;
- accommodate the construction of the new Fairview TSF, at the site of the reclaimed Bramber TSF; and
- accommodate the recovery of material from historic dumps and re-processing of this material at the existing Fairview processing plants.

#### 3.1.1.5 Use of land surface rights contrary to objects of Act

Section 53 of the MPRDA provides that persons who intend to use the surface rights of any land in any way which may result in sterilisation of a mineral resource or impede any objects of the MPRDA, has to obtain consent from the Minister of Mineral Resources prior to undertaking such activity or land use.

Section 53 of the MPRDA would therefore have been relevant to the Proclamation of the land as a Nature Reserve, considering the provisions of the NEMPAA (See Section 3.3.1) prohibiting mining in Nature Reserves. It is not known whether the MTPA obtained consent from the Minister of Mineral Resources in terms of Section 53, prior to proclaiming the BNR over the Mining Right Areas held by BML.



### 3.1.2 The Mining Charter, 2018

One of the objectives of the MPRDA is to ensure the attainment of Government's objectives to redress historical socio-economic inequalities, to ensure broad-based economic empowerment and the meaningful participation of Historically Disadvantaged Persons in the mining and minerals industry.

Section 100(2)(a) of the MPRDA empowers the Minister to develop a Broad-Based Black Economic Empowerment Charter for the South African Mining and Minerals Industry ("Mining Charter") as a regulatory instrument.

The first Mining Charter was published in 2004. The Mining Charter was amended in 2010 to streamline and expedite the attainment of its objectives. Further shortcomings of the previous Charter were identified and Government initiated another review process in 2015, culminating in the publication of the latest Mining Charter, 2018.

According to the Mining Charter, 2018, Existing mining right holders (such as Barberton Mines) must implement the Mining Charter, 2018 from the 01 March 2019 (Item 8.9). An existing mining right holder who has achieved a minimum of 26% Black Economic Empowerment (BEE) shareholding shall be recognised as compliant for the duration of the mining right. Renewal of the Right will require the Holder of the Mining Right to increase their shareholding to a minimum of 30%. The Mining Charter also prescribes allocation of benefits to host communities in accordance with an approved host community development programme, in addition to the Social and Labour Plan (SLP) requirements as per Section 23 of the MPRDA.

Further to the direct benefits accruing to historically disadvantaged South Africans by the implementation of elements of the Mining Charter (including ownership, employment equity and Human Resources Development), Mines are also now obligated to meet certain BEE targets in terms of procurement, supplier and enterprise development.

### 3.1.3 Precious Metals Act, 2005

The Precious Metals Act, 2005 (Act No. 37 of 2005) provides for the acquisition, possession, smelting, refining, beneficiation, use and disposal of precious metals and related matters.

According to this Act, "precious metal" means – (a) the metal **gold**, any metal of the platinum group and the ores of such metals; and (b) any other metal that the Minister has declared by notice in the Gazette to be a precious metal for the purposes of this Act, and the ores of any such metal.

"producer" means any person who holds a permit or right to prospect for or mine precious metals in terms of the MPRDA. According to this definition, Barberton Mines will be considered a Producer.

According to the Precious Metals Act, Section 4, no person may possess any unwrought precious metal (precious metal of a purity less than 99.9%), unless they hold a refining license, is an authorised dealer or producer, or has obtained a certificate or license from the Regulator (South African Diamond and Precious Metals Regulator) authorising such possession. Only a person who is authorised may make up, smelt or change the form of any unwrought precious metal (Section 4(5)). Similar restrictions are imposed in terms of "semi-fabricated precious metal" (i.e. refined precious metal that is in the form of sheet, tube, wire, granule, plate, strip,



rod, or sponge (including carat gold alloys as prescribed). By virtue of their Mining Right, Barberton Mines is an authorised producer.

Section 8 deals with the issue and renewal of precious metal beneficiation licenses. Section 13 specifically prohibits the transport of semi-fabricated or unwrought precious metals outside the boundaries of a mine without the prescribed documentation.

The Precious Metals Regulations were made in terms of Section 23 of the Act in July 2007 (amended in 2008 and again in 2014). The Regulations prescribe the manner in which to apply for various types of licenses and permits defined in the Precious Metals Act.

#### 3.1.4 Other Mining Legislation

Regulation 17(8) of the Mine Health and Safety Act, 1996, (MHSA) Regulations state that "no person may erect, establish or construct any buildings, roads, railways, dams, waste dumps, reserve land, excavations or any other structures whatsoever within a horizontal distance of 100 (one hundred) metres from workings, unless a lesser distance has been determined safe by a professional geotechnical specialist and all restrictions and conditions determined by him or her or by the Chief Inspector of Mines are complied with."

There are several other pieces of legislation which deal with such issues such as royalties (the Mineral and Petroleum Resources Royalty Act, 2008), title registration (the Mining Titles Registration Act, 1967), and health and safety (MHSA). These issues constitute specialist fields on their own and will not be discussed in further detail.

Sections of the MPRDA have been amended to make the Minister of Mineral Resources the responsible authority for implementing environmental matters in terms of the NEMA as it relates to mining and prospecting operations and incidental activities, and to align the MPRDA with NEMA.

The EIA Process that is being followed meets the requirements of the MPRDA and the relevant applications and reports will be submitted to the DMR in terms of Barberton Mines' application for amendment of their Fairview Mine EMP (Section 102 of the MPRDA).

# 3.2 National Environmental Management Legislation

South Africa first enacted legislation which provides for the determination of environmental policy to guide decision-making in 1989 (The Environmental Conservation Act, No. 73 of 1989), though evidence of the value placed on South Africa's environment is known from our earliest histories (Sowman, Fuggle, & Preston, 1995).

It is important to distinguish between the concept of conservation (i.e. the preservation of natural resources) and environmental management (i.e. the sustainable development of natural resources) at this point. Legislation and policy related to conservation specifically, is discussed further in Section 3.3.

During the 1970s the debate on the necessity for and appropriateness of EIA as a tool in decision-making was raised in several forums in South Africa. In 1974, an inter-disciplinary committee representing various environmental planning professions was established to prepare a set of guidelines to assist planning professionals in effectively taking environmental



aspects into account. The Guidelines were published in 1980, but never adopted officially (Sowman, Fuggle, & Preston, 1995).

Further evidence of the government's recognition of the value of EIA as an aid to decision-making was given in the 1980 "White Paper on a National Policy Regarding Environmental Conservation." It is noted that a white paper is a declaration of intention and is not legally binding. Following the White Paper, a Commission of Inquiry into environmental legislation was appointed (in1981), who proposed a draft bill on environmental conservation.

The White Paper and Draft Bill formed the basis of the Environmental Conservation Act, 1982 (Act No 100 of 1982). The act contained limited provision to regulate activities and decisions that could impact on the environment.

During the 1980s the voluntary undertaking of EIAs as an input to decision-making increased. The publication of the Integrated Environmental Management (IEM) procedural document in 1989 coincided with the promulgation of the new Environmental Conservation Act 73 of 1989, which provided for protection, sustained utilization, maintenance and improvement of the environment, and incorporation of IEM in decision-making as a regulatory tool (Sowman, Fuggle, & Preston, 1995).

The most prominent legislation dealing with environmental management and impact assessment are discussed below.

#### 3.2.1 The NEMA and EIA Regulations

The National Environmental Management Act, 1998 (Act No 107 of 1998) (NEMA), as amended was set in place in accordance with Section 24 of the Constitution of the Republic of South Africa. Certain environmental principles under NEMA have to be adhered to, to inform decision making for issues affecting the environment. Section 24 (1)(a) and (b) of NEMA state that the potential impact on the environment and socio-economic conditions of activities that require authorisation or permission by law and which may significantly affect the environment, must be considered, investigated and assessed prior to their implementation and reported to the organ of state charged by law with authorizing, permitting, or otherwise allowing the implementation of an activity.

The EIA Regulations, Government Notice (GN) Regulation 982 were published on 04 December 2014 and promulgated on 08 December 2014. Together with the EIA Regulations, the Minister also published GN R 983 (Listing Notice No. 1), GN 984 (Listing Notice No. 2) and GN R 985 (Listing Notice No. 3). The NEMA EIA Regulations, 2014 and Listing Notices have recently been amended by GN R326, (EIA Regulations) GN R 327 (Listing Notice 1); GN R325 (Listing Notice 2) and GN R324 (Listing Notice 3) of 7 April 2017. The undertaking of Listed Activities in terms of the EIA Regulations requires Environmental Authorisation to be obtained prior to commencement.

On the 2<sup>nd</sup> September 2014, the One Environmental System for mining came into effect making the NEMA the overarching National environmental legislation. In terms of Section 12(4) of the NEMA Amendment Act, 2008 (Act No. 62 of 2008) an EMP approved in terms of the MPRDA, prior to the One Environmental System coming into effect, is regarded as having been approved in terms of NEMA.



The existing operations at Fairview Mine are therefore deemed to have been approved in terms of NEMA, by virtue of alignment with the activities described in the approved EMP.

Changes to the approved activities (e.g. establishment of access roads and mechanical recovery of material from historic dumps, the establishment of a new TSF) will be subject to Environmental Authorisation being granted in terms of NEMA and the EIA Regulations, 2014 (as amended).

There are new Listed Activities associated with the proposed Project, as summarized in Section 2.5. These Activities are identified in terms of Listing Notice 1, 2 and 3 of the EIA Regulations 2014 (as amended) and Category A, B and C of the List of Waste Management Activities that have, or are likely to have, a detrimental effect on the environment (as amended).

A comprehensive Scoping and EIA Process is therefore relevant to the application. The application process is discussed in Section 2.3 of this report, and is in accordance with the EIA Regulations, 2014 (as amended). The EIA Regulations further set out the requirements for Reporting, Timeframes, Public Participation and Specialist Reports.

The Scoping and EIA Process that is being undertaken in terms of the proposed Project is undertaken in accordance with the Regulations.

#### 3.2.2 National Environmental Management: Waste Act

The National Environmental Management Waste Act, 2008 (Act No. 59 of 2008) (NEMWA) provides for national norms and standards for regulating the management of waste, and the licensing and control of waste management activities.

Regulations to the NEMWA identifies a number of activities which require a Waste Management License (WML) prior to being undertaken.

The establishment and reclamation of residue deposits and residue stockpiles is included in the List of Activities as follows:

Category B, Activity 11: The establishment or reclamation of a residue stockpile or residue deposit <u>resulting from activities which require a mining right</u>, exploration right or production right in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002).

The original Bramber TSF (where the new Fairview TSF is proposed) is approved in terms of the Fairview EMP. However, the TSF has been reclaimed to ground-level and it is considered that the Project does not merely involve the re-establishment of the old TSF, but rather the design, construction and operation of a new facility, albeit on the previous TSF footprint.

In addition to the above, Category B Activity 7 identifies the disposal of any quantity of hazardous waste to land as an activity requiring a WML, and Activity 10 relates to "the construction of a facility for a waste management activity listed in Category B of this Schedule".

The proposed Fairview TSF will therefore require authorization in terms of the NEMWA.

It is posited that reclamation of processed material that was deposited onto BML dumps prior to the commencement of the MPRDA (i.e. 1 May 2004), does not constitute a waste management activity, as these dumps did not result from activities which required any rights



in terms of the MPRDA (no deposition has occurred on these dumps since the MPRDA commenced).

It can therefore be argued that the reclamation of the historic dumps does not constitute a Listed Activity in terms of NEMWA.

The definition of "residue stockpile" provided for in the NEMWA differs from that provided in the MPRDA. According to NEMWA, a residue stockpile is defined as "any debris, discard, tailings, slimes, screening, slurry, waste rock, foundry sand, mineral processing plant waste, ash or any other product derived from or incidental to a mining operation and which is stockpiled, stored or accumulated within the mining area for potential re-use, or which is disposed of by the holder of a mining right, mining permit or production right or an old order right, **including historic mines and dumps created before the implementation of this Act**".

Therefore, the target dumps at Fairview are regarded as residue stockpiles in terms of the NEMWA, but reclamation of these dumps is still excluded from the Listed Waste Management Activity, which refers specifically to reclamation of a "residue deposit resulting from activities which require a mining right, exploration right or production right in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), and not to reclamation of stockpiles which resulted from activities which were not governed by the MPRDA,

The process to apply for a WML is in this case an integrated process to the application for Environmental Authorisation.

# 3.2.2.1 NEMWA: Regulations regarding the planning and management of Residue Stockpiles and Residue Deposits

The Residue Deposits Regulations, 2015, aims to regulate the planning and management of residue stockpiles and residue deposits from prospecting, mining, exploration or production operations.

The NEMWA prescribes a Waste Classification and Management System comprising of three Regulations that:

- establish a methodology for the classification of all wastes (GN R 634);
- provides methods for the assessment of wastes to be disposed of to landfill (GN R 635)
  and to determine the type of landfill site on which such waste can be disposed of (GN
  R 636); and
- Regulations specifically pertaining to residue stockpiles and residue deposits (GN R 632).

While the term "Landfill" is not specifically defined in the Act or its Regulations, it is accepted that there is a clear distinction between a landfill site and a residue stockpile/deposit and GN R 635 and 636 cannot be made applicable to a residue stockpile/deposit (including the proposed Fairview TSF). GN R 632 was published in July 2015 and supersedes the waste classification and management system Regulations promulgated in August 2013.

Therefore, the recommendations on a barrier system to be implemented at the Fairview TSF will be based on a risk-based approach guided by the waste classification.



## 3.2.3 National Water Act, 1998 (Act No. 36 of 1998) (NWA)

The NWA provides for the sustainable and equitable use and protection of water resources. It is founded on the principle that the National Government has overall responsibility for and authority over water resource management, including the equitable allocation and beneficial use of water in the public interest, and that a person is only entitled to use water, without a license, if the use is permissible in terms of Section 22 of the NWA.

The competent authority in respect of water use licenses is the Department of Human Settlements, Water and Sanitation (DHSWS, previously the Department of Water and Sanitation, DWS, and the Department of Water Affairs and Forestry, DWAF).

Fairview Mine was issued with an Integrated Water Use License (IWUL) in August 2016 (License No. 04/X23F/ABEFGJ/4725). The License is valid for a period of ten years. The authorised water uses are summarised in Table 5 and shown on Figure 14.

The proposed project will be associated with additional water uses that are not currently included in the Fairview IWUL. The integrated water use license application (IWULA) process and compilation of the Integrated water and waste management plan (IWWMP) is being undertaken by Escon consulting, and will not be discussed in detail in this report.

Table 5: Water Uses Authorised at Fairview Mine

| Water<br>define | r Use as<br>ed in the NWA           | Description   | Coordinates                   | Volume          |
|-----------------|-------------------------------------|---|-------------------------------|-----------------|
| Al              | Taking water from a water resource. | Abstraction from boreholes to supply mine village, plant, offices, clinic, workshop, stores, hostels, change houses and Barberton Gold (Pty) Ltd with domestic water. | 25°43'35.6"\$<br>31°03'56.3"E | 142,350<br>m³/a |
| A2              |                                     | Abstraction from Suid Kaap River to supply Mine village, plant, offices, clinic, workshops, stores, hostels, change houses and Verulam community with domestic water. | 25°42'01.0"S<br>31°04'26.2"E  | 521,500<br>m³/a |
| A3              |                                     | Abstraction from Hyslops Creek to supply mine village, plant, offices, clinic, workshops, stores, hostels, change houses with domestic water.                         | 25°44'55.8"S<br>31°04'66.5"E  | 175,000<br>m³/a |
| A4.1            |                                     | Abstraction of groundwater for remediation purposes, interception of  | 25°44'07.3"S<br>31°04'52.4"E  | 19,345<br>m³/a  |
| A4.2            |                                     | plume from the old rousting plant footprint (interception boreholes)  | 25°43'58.86"S                 | 19,345<br>m³/a  |



| Water<br>define | d Use as       | Description  | Coordinates               | Volume            |
|-----------------|----------------|--|---------------------------|-------------------|
|                 |                |  | 31°09'22.2"E <sup>3</sup> |                   |
| A4.3            |                |  | 25°44'01.6"S              | 19,345            |
|                 |                |  | 31°04'49.1"E              | m³/a              |
| A5.1            |                | Abstraction of groundwater for   | 25°43'06.0"S              | 10,164<br>m³/a    |
|                 |                | remediation from the Loubschers Creek<br>(Scavenger Boreholes to intercept     | 31°03'35.5"E              |                   |
| A5.2            |                | pollution plume).  | 25°43'16.1"S              | 3,390             |
|                 |                | Water is used in the BTRP.   | 31°03'47.3"E              | m³/a              |
| A5.3            |                |  | 25°43'08.8''S             | 44,664            |
|                 |                | It is noted that Scavenger Boreholes 3 & 4                                     | 31°03'34.5"E              | m³/a              |
| A5.4            |                | in license have exact same coordinates.  | 25°43'08.8"S              | 72,792            |
|                 |                |  | 31°03'34.5"E              | m³/a              |
| A5.5            |                |  | 25°43'11.8"S              | 14,000            |
|                 |                |  | 31°03'41.3"E              | m³/a              |
| A5.6            |                |  | 25°43'08.9"S              | 3000              |
|                 |                |  | 31°03'37.2"E              | m³/a              |
| A6              |                | Abstraction from borehole to irrigate 2 ha                                     | 25°44'23.9"S              | 2,047             |
|                 |                | of the local community vegetable garden  | 31°03'55.8"E              | m³/a              |
| A7              |                | Abstraction of water from underground  | 25°43'55.8"S              | 779,202           |
|                 |                | mine workings at Fairview, to use for  | 31°06'01.7"E              | m <sup>3</sup> /a |
|                 |                | reworking of TSFs.   |                           |                   |
| A8              |                | Abstraction of water from underground mine workings at New Consort, to use for | 25°39′13.0″S              | 657,000           |
|                 |                | reworking of TSFs.   | 31°04'01.3"E              | m³/a              |
| В               | Storing of     | Storage of potable water into  | 25°43'57.0"S              | 624,150           |
|                 | Water          | underground reservoir  | 31°06'03.1"E              | m³/a              |
| E               | Engaging in    | Irrigation with wastewater: Irrigation   | 25°43'57.0''S             | 31,390            |
|                 | a controlled   | rehabilitation: Irrigation of land to leach                                    | 31°06'03.1"E              | m³/a              |
|                 | activity       | out the Arsenic Roasting Plant Footprint.                                      |                           |                   |
| F1              | Discharging or | Discharge of excess underground water  | 1 25 45 55.0 5 1 767 435  | 262.435           |
|                 | waste or water | for continuation of mining into Olifants Creek                                 | 31°06'01.7"E              | m³/a              |

<sup>-</sup>

 $<sup>^3</sup>$  It is noted that this coordinate is incorrectly captured in the IWUL and should be 25°43'58.86"S; 31° **B**'22.20"E.



| Water Use as defined in the NWA |  | Description   | Coordinates                                | Volume              |
|---------------------------------|--|---|--|---------------------|
| F2                              | containing waste into a water resource through a pipe, canal, sewer, sea outfall or other conduit. | Discharge of excess underground water from process water tank and overflow from treatment plant backwash into Olifants Creek. | 25°43'56.8"\$<br>31°04'23.6"E              | 115,304<br>m³/a     |
| G1                              | Disposing of waste in a manner   | Disposal of rainfall runoff water, overflow from potable treatment backwash into workshop dam                                 | 25°43'55.30"S<br>31° 3'21.80"E             | 153,300<br>m³/a     |
| G2                              | which may detrimentally impact on a  | Disposal of tailings to Bramber TSF   | 25°43'35.60"S<br>31° 3'56.30"E             | 21,900<br>tons/a    |
| G3                              | water resource.  | Disposal of tailings to Bramber TSF extension   | 25°43'40.20"S<br>31° 4'2.50"E              | 156,950<br>tons/a   |
| G4                              |  | Disposal of supernatant water from Bramber TSF to the Bramber RWD   | 25°43'34.10"S<br>31° 3'58.10"E             | 18,250<br>m³/a      |
| G5                              |  | Disposal of supernatant water BTRP RWD into Bramber extension RWD   | 25°43'34.10"S<br>31° 3'58.10"E             | 87,235<br>m³/a      |
| G6                              |  | Emergency Dam to dispose supernatant water from re-mining of Bramber TSF  | 25°43'48.80"S<br>31° 3'45.60"E             | 17,800<br>m³/a      |
| G7                              |  | Disposal of tailings into BTRP/New Bramber TSF  | 25°43'30.80"S<br>31° 3'42.90"E             | 1,241,000<br>tons/a |
| G8                              |  | Disposal of supernatant water from BTRP/New Bramber TSF to new Bramber RWD  | 25°43'55.80"S<br>31° 6'1.70"E <sup>4</sup> | 1,204,500<br>m³/a   |
| G9                              |  | Disposal of underground water from New Consort, into workshop dams to be reused in BTRP and Biox plants.                      | 25°43'34.10"S<br>31° 3'58.10"E             | 657,000<br>m³/a     |
| G10                             |  | Disposal of underground water from Fairview to the workshop dams (surplus water after the mill tanks).                        | 25°43'55.30"S<br>31° 3'21.80"E             | 300,000<br>m³/a     |

<sup>&</sup>lt;sup>4</sup> It is noted that this coordinate is incorrectly captured in the IWUL



| Wate<br>defin | r Use as<br>ed in the NWA   | Description  | Coordinates                    | Volume          |
|---------------|---|--|--------------------------------|-----------------|
| G11           |   | Disposal of treated sewage waste water.                      | 25°43'32.40"\$<br>31° 4'8.30"E | 70,304<br>m³/a  |
| j             | Removing, discharging or disposing of water found underground if it is necessary for the efficient continuation of an activity or for the safety of people. | Dewatering of water found underground for mine continuation. | 25°43'55.8"S<br>31° 6'01.7"E   | 779,202<br>m³/a |



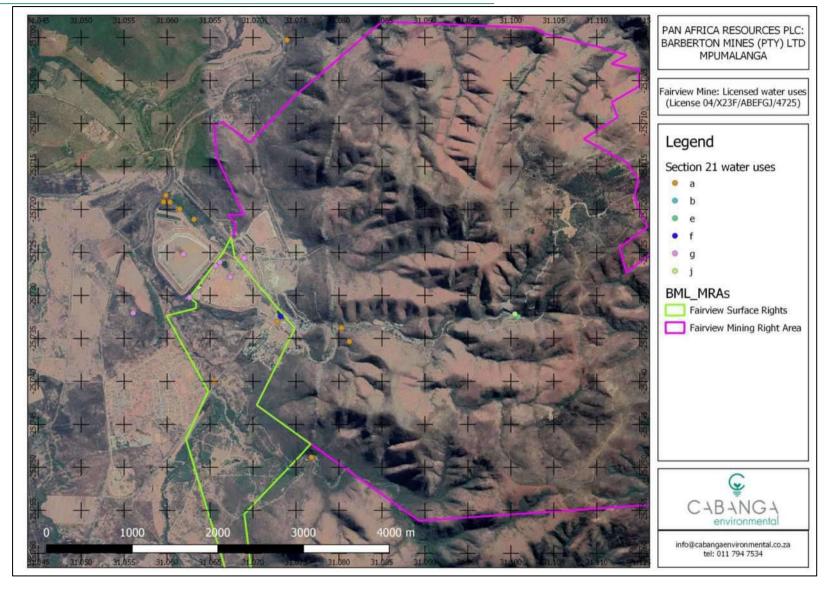


Figure 14: Authorised water uses according to the Fairview Mine IWUL



# 3.2.3.1 NWA: Regulations for the use of water for mining and related activities in GNR 704 of 4 June 1999 (GNR 704).

Specific regulations made in terms of Section 26(1) of the NWA pertain to the use of water for mining and related activities. The provisions of GN704 will be incorporated into the design of the proposed Project, where possible. Where the implementation of provisions of GN704 is not possible, the IWULA must include application for exemption from the relevant provisions, as per Regulation 3 of GN704.

Regulation 2 of GN704 stipulates this Mine's obligations in terms of notifications to the DWS, if changes take place at the Mine, or if incidents occur. These provisions will be incorporated into the Mine's updated EMP and associated emergency response plan and communication protocols.

There are also existing activities at Fairview Mine that require exemption from GN704, which are not currently included in the approved WUL. These relate mainly to the placement of infrastructure within drainage lines and in close proximity to drainage lines, discharge from dirty water facilities into clean water systems, waste disposal and security.

The WUL Application for the Project should include application for exemption of the relevant provisions of GN704 for the proposed as well as the existing operations.

# 3.2.4 National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) (NEMAQA)

According to the National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) (NEMAQA) the Department of Environmental Affairs (DEA), the provincial environmental departments and local authorities (district and local municipalities) are separately and jointly responsible for the implementation and enforcement of various aspects of NEMAQA. A fundamental aspect of the new approach to the air quality regulation, as reflected in the NEMAQA is the establishment of National Ambient Air Quality Standards (NAAQS) (GN R 1210 of 2009). These standards provide the goals for air quality management plans and also provide the benchmark by which the effectiveness of these management plans is measured.

An Air Quality Impact Assessment (AQIA) has been commissioned as part of the EIA process.

Activities that are identified in GN 983 require an Atmospheric Emissions License AEL to be issued in terms of NEMAQA. The proposed TSF establishment and proposed recovery of waste material from historic dumps do not constitute Listed Activities in terms of the NEMAQA.

GN701 declared Greenhouse gasses as priority air pollutants. The greenhouse gas reporting regulations (GenN275) identifies Mining and Quarrying as one of the industries who must report their Greenhouse Gas Emissions to the competent authority.

The National Atmospheric Emission Reporting Regulations, 2015 identifies all mines as a Group C Emission Source, and requires the Mine to report to the National Atmospheric Emissions Information System (NAEIS) on their dust,  $PM_{10}$  and  $PM_{2.5}$  emissions on an annual basis. These requirements will be incorporated into the updated Fairview EMP.



## 3.3 National Legislation related to Protected Areas and Conservation

Prior to European colonialization of South Africa, the use of natural resources was controlled by local traditional leaders, healers and religious beliefs. Colonialization brought increased pressure on natural resources, to the point where authorities were forced to regulate activities such as hunting in the Cape (1656) and preserving the Southern Cape Forests (1811). The first game reserves in South Africa were established in the Knysna and Tsitsikamma forests in 1886. Fencing of reserves have led to forced relocation of South African communities, and the associated loss of land and access to resources, and conservation became an increasingly elitist industry. This period created distinct divisions of the land: European settlement areas, African communal areas and the beginning of the demarcation of conservation areas. The African population was forced into smaller areas of land. The notorious Land Acts of 1913 and 1936 legislated this divide, and left indigenous people with only 13% of the total land area in South Africa. The apartheid era further enforced the division between communal-managed and formally managed protected areas areas. (https://www.environment.gov.za/projectsprogrammes/peopleparks/southafrican\_conserva tionhistory).

After democracy in 1994, the land issue was addressed in many cases by the successful lodgement of land claims, which saw previously displaced people accessing conservation areas for their own use again.

The government is now faced with the challenge of seeing that previously disadvantaged people are supported and advised to ensure they get the benefits they deserve, whilst upholding their conservation mandates under the NEMPAA (https://www.environment.gov.za/projectsprogrammes/peopleparks/southafrican\_conservationhistory).

The following sections provide an overview of the most pertinent legislation relating to conservation in South Africa at present.

# 3.3.1 National Environmental Management: Protected Areas Act, 2003 (Act No 57 of 2003) (NEMPAA)

The National Environmental Management: Protected Areas Act, 2003 (Act No 57 of 2003) (NEMPAA) (as amended) provides for the protection and conservation of ecologically viable areas of South Africa's biological diversity, natural landscapes and seascapes. It further provides for the establishment of a register of protected areas (SAPAD), the management of those areas and for intergovernmental co-operation and public consultation in matters concerning protected areas.

The Fairview MRA overlaps with the proclaimed boundaries of Barberton Nature Reserve, a proclaimed protected area (nature reserve) in terms of the NEMPAA and shown in the SAPAD database. The majority of the Fairview, New Consort and Sheba MRAs are located within the proclaimed nature reserve.

Barberton Nature Reserve's current boundaries was proclaimed as a Provincial Nature Reserve in terms of the Mpumalanga Nature Conservation Act, 1998 (Act No. 10 of 1998), on 22 May 2014. SAPAD indicates that it is a National Nature Reserve and amended the boundaries of the reserve in Quarter 2 of 2018.



The NEMPAA holds that the State is the Trustee of Protected areas in the country and must implement the NEMPAA in partnership with the people of South Africa to achieve the progressive realisation of the rights contained in Section 24 of the Constitution. The NEMPAA must be interpreted and applied in accordance with the principles set out in the NEMA (Section 5(1)a) and must be read, interpreted and applied in conjunction with the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) (NEMBA) (Section 6).

Section 7 of NEMPAA deals specifically with conflicts with other legislation and states that:

- "1) In the event of any conflict between a section of this Act and
  - (0) other national legislation, the section of this Act <u>prevails if the conflict</u> <u>specifically concerns the management or development of protected</u> areas;"

The implication of this provision is essentially in conflict with provisions of the MPRDA and the pre-existing mining rights in the areas that were declared parts of the Barberton Nature Reserve. The Mining Rights were approved and valid long before the Barberton Nature Reserve was proclaimed as such, and the proclamation seemingly took no notice of existing rights of the Mining Right Holder on the properties.

#### 3.3.1.1 Purpose of Protected Areas

Section 17 of the NEMPAA specifically deals with the purpose of protected areas and states that: The purpose of the declaration of areas as protected areas are –

- (a) to protect ecologically viable areas representative of South Africa's biological diversity and its natural landscapes and seascapes in a system of protected areas;
- (b) to preserve the ecological integrity of those areas;
- I to conserve biodiversity in those areas;"
- (j) to manage the interrelationship between natural environmental biodiversity, human settlement and economic development;
- (k) generally, to contribute to human, social, cultural, spiritual and economic development;" (among others).

Considering the current disturbed ecological state of the surface areas associated with the proposed dump reclamation and the Proposed new TSF on the old Bramber TSF footprint, the sites cannot be said to be contributing significantly to the preservation of ecological integrity of the area. The site of the proposed new TSF falls outside of the proclaimed nature reserve. The historic dumps fall within the proclaimed nature reserve. Though it is anticipated that the proposed reclamation will not be in keeping with the intended conservation-related surface land use associated with the Nature Reserve, it is posited that the existence of these historic dumps is not in keeping with the intentions either. Reclamation of these dumps could in future facilitate improved conservation practices within the boundaries of the Nature Reserve, once mining is concluded and Fairview obtains closure.



#### 3.3.1.2 Declaration of protected areas

In terms of Section 23 of the NEMPAA, the Minister or MEC may by notice in the Gazette declare an area specified in the notice as a nature reserve, and assign a name thereto. Such declaration may only be issued –

- "(a) to supplement the system of national parks in South Africa;
- (b) to protect the area if the area -
  - (i) has significant natural features or biodiversity;
  - (ii) is of scientific, cultural, historical or archaeological interest; or
  - (iii) is in need of long-term protection for the maintenance of its biodiversity or for the provision of environmental goods and services;
- (c) to provide for a sustainable flow of natural products and services to meet the needs of the local community;
- (d) to enable the continuation of such traditional consumptive uses as are sustainable; or
- (e) to provide for nature-based recreation and tourism opportunities."

It cannot be said that Barberton Nature Reserve, inclusive of the surface areas affected by the existing and past mining activities at Fairview (and the other mines in the area), was proclaimed to supplement the system of national parks in the country, as it is not geographically connected to any national parks and was proclaimed as a Nature Reserve and not a National Park, in terms of the NEMPAA Section 9.

The area associated with the BML Mines and surface infrastructure is disturbed and therefore does not warrant protection due to the biodiversity aspects associated with those areas. The sites of the historic dumps potentially hold biodiversity value and will be evaluated in detail in the EIA phase.

It is important to note that there are several illegal gold miners present in the area, who access gold reserves via historical shafts and adits at great risk to their personal safety. BML has sealed various of the historic adits over the years, but this does not deter the illegal miners from tunnelling into the mountain in search of gold. This activity may be described as "traditional consumptive uses" in the area, but such activities are definitely not legal in terms of the MPRDA or NEMA, and are not sustainable at all.

The NEMPAA prescribes a consultation process to be undertaken prior to the declaration of Nature Reserves, and specifically requires the Minister or MEC (as the case may be) to "in the prescribed manner, consult any <u>lawful occupier with a right in land</u> in any part of the area affected".

Section 33 of NEMPAA, dealing with public participation, states that the Minister or MEC must if it is proposed to declare any private land as a protected environment, send a copy of the proposed notice by registered post to the last known postal address of each owner of land within the area to be declared, and inform in an appropriate manner any other person whose rights in such land may materially and adversely be affected by such declaration.



#### 3.3.1.3 Restriction of certain activities in protected areas

Section 48 of the NEMPAA states that: "despite other legislation, no person may conduct commercial prospecting, mining, exploration, production or related activities... in a nature reserve."

The Act does allow for prospecting, mining, exploration, production or related activities in a <u>protected environment</u> if the Minister of Environmental Affairs and the Minister of Mineral Resources both give their written permission.

"protected environment" means -

(a) an area declared, or regarded as having been declared, in terms of section 28 as a protected environment;

(b) an area which before or after the commencement of this Act was or is declared or designated in terms of provincial legislation for a purpose for which that area could in terms of section 28(2) be declared as a protected environment; or

(c) an area which was a lake area in terms of the Lake Areas Development Act, 1975 (Act No. 39 of 1975), immediately before the repeal of that Act by section 90(1) of this Act.

and includes an area declared in terms of section 28(1) as part of an area referred to in paragraph (a), (b) or (c) above;

It is noted that BNR is a Nature Reserve, and was not declared as a protected environment. Ministerial consent is therefore not necessarily applicable to the Application.

According to the Act, the Minister was supposed to review mining activities which were lawfully conducted in nature reserves, protected areas etc. when the NEMPAA took effect, and then prescribe conditions under which those activities may continue.

The Fairview Mining Right was granted in terms of Item 7 of Schedule II of the MPRDA and the converted right registered in May 2011 (i.e. before the proclamation of the BNR in 2014). In light of Section 53 of the MPRDA (Section 3.1.1.5), the proclamation of the BNR over land on which mining rights were already held without obtaining consent to sterilise the mineral resources in the area, remains questionable.

# 3.3.2 National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) (NEMBA)

The NEMBA provides for the management and conservation of South Africa's biodiversity within the framework of the NEMA. The Act relates to the protection of species and ecosystems that warrant national protection, among others.

Certain Fauna and Flora Species of Conservation Concern (SCC) are known to occur in the general vicinity of the site.

A biodiversity specialist study (Flora and Fauna) has been commissioned as part of the EIA Process. If there are protected species that must be directly affected by the proposed project, that cannot be avoided, the necessary permits for translocation of these species will have to be obtained prior to their disturbance.



#### 3.3.3 Conservation of Agricultural Resources Act, 1983 (Act No 43 of 1983) (CARA)

CARA provides for control over the utilization of the natural agricultural resources of the Republic to promote the conservation of soil, water sources and vegetation and the combating of weeds and invader plants.

The site is not anticipated to have a high agricultural potential, but this will be confirmed through the soils / agricultural assessment as part of the EIA.

Due to past disturbance of the sites (both the proposed new TSF site, and the sites associated with the historic dumps), it is anticipated that alien invasive species are a threat to the biological diversity of surrounding areas. Fairview Mine must compile and implement a strict alien invasive species management plan.

The Act specifically prohibits any person from spreading weeds or allowing weeds to be spread or reproduced.

The Biodiversity study to be compiled as part of the EIA Process will also identify problem species on site and comment on the extent of alien invasive species encroachment on the site.

The contradictory rights of the BNR and Fairview Mine may create some conflict and confusion in assigning responsibility for the management of alien invasive species (as this is supposed to be the responsibility of the surface holder, in terms of the Act). It is recommended that BML and BNR come to a written agreement and partnership with regards to the management of alien species, which relationship could be mutually beneficial to both parties.

#### 3.3.4 National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA)

The NHRA aims to promote good management and preservation of the country's Heritage Resources.

Various heritage resources are known to occur in the area. The heritage resources on and adjacent to the potentially affected sites must be managed and preserved by the implementation of appropriate buffer zones and access control.

A Heritage / Archaeological impact assessment has been commissioned as part of the EIA.

It is acknowledged that the dumps that are targeted for reclamation are older than 60 years. The NHRA prohibits any person from demolishing any structure or part thereof which is older than 60 years without a permit issued by the relevant heritage resources authority. The NHRA defines "structure" as "any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith".

Therefore, the proposed reclamation will be preceded by an application to the relevant provincial heritage resources authority. Such application will be accompanied by the opinion of a registered archaeologist as to the heritage value of the dumps.

If other heritage resources protected under the NHRA are to be affected by the project, BML will have to apply for destruction of these resources, after following the required Phase 2 heritage assessments. The requirement will be confirmed by the specialist study in the EIA Phase.



## 3.3.5 World Heritage Convention and the World Heritage Convention Act, 1999 (Act No. 49 of 1999).

The World Heritage Convention (Convention concerning the protection of the World Cultural and Natural Heritage) defines the kinds of natural or cultural sites which can be considered for inscription on the World Heritage List. The idea of creating an international organisation to protect heritage resources emerged from two distinct movements which focussed on the protection of cultural sites and the conservation of nature respectively.

A catalytic event was the construction of the Aswan Dam in Egypt which would have flooded the valley that contains the Abu Simbel Temples (an important site relating to Ancient Egyptian Civilisation). The Governments of Egypt and Sudan appealed the project in 1959, and UNESCO (United Nations Educational, Scientific and Cultural Organization) launched an international safeguarding campaign. In the end, the Abu Simbel and Philae Temples were dismantled and re-assembled on dry ground, thus facilitating the construction of the Aswan Dam, without causing irreplaceable loss of the important cultural resources.

Following successes in Egypt, Italy, Pakistan and Indonesia, UNESCO with the help of the International Council on Monuments and Sites (ICOMOS) prepared a draft convention on the protection of cultural heritage.

In 1965 a White House Convention in Washington DC in the United States of America called for the establishment of a "World Heritage Trust" to stimulate international cooperation to protect natural areas, scenic areas and historic sites throughout the world. In 1968 the International Union for the Conservation of Nature (IUCN) developed similar proposals. In 1972 these proposals were presented to the United Nations conference on Human Environment, following which a single text was agreed upon by all concerned parties. The "Convention Concerning the Protection of World Cultural and Natural Heritage" (the World Heritage Convention) was adopted by the UNESCO General Conference on 16 November 1972.

State Parties are countries that adhere to the World Heritage Convention, thereby agreeing to identify and nominate properties to be considered for inscription on the World Heritage List. South Africa ratified the convention on 10 July 1997 and is home to ten World Heritage Sites (Table 6):

Table 6: South Africa's World Heritage Sites

| Name of the Site                        | Province                                   | Date inscribed / modified              |  |
|---|--|--|--|
| Robben Island                           | Western Cape                               | 1999                                   |  |
| iSimangaliso Wetland Park               | Kwa-Zulu Natal                             | 1999                                   |  |
| Fossil Hominid Sites of South<br>Africa | Gauteng, Limpopo & North-West<br>Provinces | 1999, Extension 2005                   |  |
| Maloti-Drakensberg Park                 | Kwa-Zulu Natal and Lesotho                 | 2000 (extension 2013)                  |  |
| Mapungubwe Cultural<br>Landscape        | Northern Province                          | 2003, minor boundary modification 2014 |  |



| Name of the Site                                 | Province  | Date inscribed / modified |
|--|---|---------------------------|
| Cape Floral Region<br>Protected Areas            | Western Cape, with portions in Northern Cape and Eastern Cape | 2004                      |
| Vredefort Dome                                   | North-West and Free State<br>Provinces                        | 2005                      |
| Richtersveld Cultural and<br>Botanical Landscape | Northern Cape   | 2007                      |
| Khomani Cultural<br>Landscape                    | Northern Cape, Botswana & Namibia.                            | 2017                      |
| Barberton Makhonjwa<br>Mountains                 | Mpumalanga Province   | 2018                      |

The World Heritage Convention Act, 1999 (Act No. 49 of 1999) provides for the incorporation of the World Heritage Convention into South African Law, and the enforcement and implementation of the convention in South Africa. The Act also prescribes the preparation, contents and implementation of integrated management plans for World Heritage Sites (by the appropriate authorities).

UNESCO also published Operational Guidelines for the implementation of the World Heritage Convention (the latest update is dated 12 July 2017). The Guidelines aim to facilitate the implementation of the convention by setting out procedures for:

- The inscription of properties;
- The protection and conservation of inscribed properties;
- The granting of international assistance in terms of the World Heritage Fund; and
- The mobilisation of national and international support in favour of the convention.

The Fairview MRA borders on the Barberton-Makhonjwa Mountains World Heritage Site (WHS) (Figure 2). Conventional perimeter buffer zones are not mandatory for WHSs and may be omitted with reasons. The Nomination Dossier for this WHS states that "geosites are only threatened by direct in situ impacts, so buffer zones protecting against external threats are redundant". Outside of the formally protected areas, geosites are managed in terms of the NHRA, and once registered with the South African Heritage Resource Agency (SAHRA) will be subject to local protection zones of 20 to 50-meter radius buffer zones. The geosites associated with the WHS are between Barberton and the Josefsdal / Bulembo border. The Project should therefore not have any direct impacts on the WHS inscription.



## 3.4 Provincial and Local legislation and guidelines

## 3.4.1 Mpumalanga Nature Conservation Act (Act No. 10 of 1998) and Mpumalanga Tourism and Parks Agency Act (Act 5 of 2005)

The Mpumalanga Tourism and Parks Agency Act (MTPA Act) provides for the establishment and management of the Mpumalanga Tourism and Parks Agency (MTPA) and the sustainable development and improvement of the tourism industry in Mpumalanga.

Section 2 of the MTPA Act establishes the MTPA as a juristic person. The MTPA came into existence on 1 April 2006 following the merger of the Mpumalanga Parks Board and Mpumalanga Tourism Authority.

The powers and functions of the MTPA in respect of conservation management of the natural resources of the Province include administration of the Mpumalanga Nature Conservation Act. The Mpumalanga Nature Conservation Act commenced on 1 January 1999 and consolidates and amends previous laws relating to nature conservation in Mpumalanga.

The Schedules to the Act list specially protected game, protected game, ordinary game and protected wild animals, and makes specific provisions regarding hunting, catching, purchase, donation and sale of such game, including the removal, receipt, handling and conveyance of dead game, and the importing and exporting of wild animals from the Province.

The Mpumalanga Nature Conservation Act states in Section 40 that no person shall establish or operate a game park, zoological garden, bird sanctuary, reptile park or snake park or similar institution without a permit (unless the institution is subject to the provisions of the Cultural Institutions Act, 1969 (Act No. 29 of 1969)<sup>5</sup>.

Chapter 4 of the Mpumalanga Nature Conservation Act deals with Problem Animals, including black-backed jackal (Canis mesomels), Caracal / Red Lynx (Felis caracal) and Bush Pig (Potamochoerus porcus). Chapter 5 deals with Fisheries.

The Act also places specific restrictions on the picking, donation, sale, export, removal, purchase and receipt of protected and indigenous plants, and invader weeds and plants (Chapter 6).

#### 3.4.2 City of Mbombela Local Municipality Spatial Development Framework 2018

The formulation of the Spatial Development Framework (SDF) for the City of Mbombela Local Municipality (COM) was primarily guided by the provisions of the Spatial Planning, Land Use and Management Act, 2013 (Act No. 16 of 2013) (SPLUMA), the Municipal Systems Act, the Local Government Municipal Planning and Performance Management Regulations and the Mbombela By-Law on spatial planning and land use management guide. The SDF has recently been updated following the amalgamation of the former Mbombela and Umjindi Local Municipalities. In terms of Section 20 of SPLUMA, the SDF is still recognised as part of the Municipality's Integrated Development Plan (IDP).

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<sup>&</sup>lt;sup>5</sup> The 1969 Act has been repealed and replaced by the Cultural Institutions Act, 1998 (Act No. 119 of 1998). The Act provides for the payment of subsidies to certain cultural institutions, among other provisions.



The SDF is an indicative plan intended to show desired patterns of land use, directions for future growth, indicate the alignment of urban edges and depict special development areas. The impact of the SDF is limited to provide policy to guide and inform land development and management. It does not change or confer real rights on land (City of Mbombela Local Municipality, 2018).

In 2013, mining contributed 3% of the COM's Gross Value Added (GVA) (in 2011 the contribution was 4.4% in former Umjindi and 2.2% in former Mbombela). The SDF points out that the Mpumalanga Province produces a high 17.6%, indicating that opportunities exist for COM to provide services for this growing sector in the province (City of Mbombela Local Municipality, 2018).

The SDF identifies the town of Barberton (and also the Project site) as falling within the "Southern Region" comprising Wards 13,27,28,41,42,43,44 & 45. The Fairview Mine and Project site is in ward 43.

In terms of the Draft IDP 2017-2016, the pressing needs for the COM with specific emphasis on ward 43 are summarized as follows:

- Insufficient supply of adequate housing in rural areas, and backlog in the allocation of residential stands
- Lack of social amenities in rural areas;
- Lack of primary healthcare facilities in rural areas;
- High rate of crime in rural areas;
- High level of unemployment as a result of lack of skills in rural areas;
- Poor condition of cemeteries in rural areas;
- Lack of access to waste removal services and absence of waste deposit facilities;
- Higher backlogs of ablution facilities in rural areas; and
- High incidences of illegal occupation of land.

The COM SDF 2018 identifies Structural Elements that essentially dictate the location of development and direction of growth within the Municipal Area. The Fairview main infrastructure area as well as the Moon and Harper TSFs are located within the proclaimed boundaries of the Barberton Nature Reserve, which also affects a portion of the BTRP processing plant site. The areas where the historic dumps are located are within the nature reserve boundary in areas identified by the SDF as Conservation Areas.

The Barberton Makhonjwa Mountain World Heritage Site, as well as the Barberton Nature Reserve are identified in the SDF as significant opportunities in terms of Tourism Development Potential within the COM.

#### 3.4.3 Barberton Nature Reserve: Integrated Management Plan

In the context of the NEMPAA, it is important to understand how the Barberton Nature Reserve developed over the years. According to its integrated development Plan (MTPA, 2012) Barberton Nature Reserve consists of three distinct phases (Figure 16):

- Phase 1: The Farm Hillside 459JT and the Farm Barberton Nature Reserve 1015IT, west of the R40 road
- Phase 2: separated into three areas:



- Area 1: The Farm Barberton Nature Reserve 1016IT east of the R40 Road, and the Farm Barberton Nature Reserve 955 JU;
- Area 2: The Farm Barberton Nature Reserve 954 JU west and south of the Noordkaap River;
- Area 3: The Farm Barberton Nature Reserve 954 JU east and north of the Noordkaap River;
- Phase 3 (Mountainlands) over Portions of the following Farms: Saffraan 562 JU, Kameelspoor 563JU; Dublin 302JU, Raasblaar 651JU; Flamboyant 560JU; Moepel 559JU; Mandarin 558JU; Hayward 310JU; Mimosa 557JU; Bramber Oos 314JU; Worrall 352JU; Bickenhall 346JU; Dycedale 368JU; Wonder Scheur 362JU; Twello 373 JU; Colombo 365JU; Lancaster 359JU; Mhlahle 948JU and Sheba 949JU.

It is interesting to note that Phase 3 (Mountainlands) originally comprised a nature reserve independent of the Barberton Nature Reserve, albeit with slightly different boundaries, as shown in their Zonation Map from 2005 (Figure 15).

The BNR Integrated Management Plan (MTPA, 2012) acknowledges the presence of the active mines, and states (page 23) that the following management must be applied to these areas:

- Stringent monitoring by parks authority should be applied to all new activities.
- Enforced adherence to conditions of EMP. Management of conflict with Conservation and Tourism objectives.
- Existing activities must be carefully monitored.

The reference in the management plan to "new activities" implies that BNR expects and allows for expanded and continuing mining development within the MRA's that overlap with the BNR.

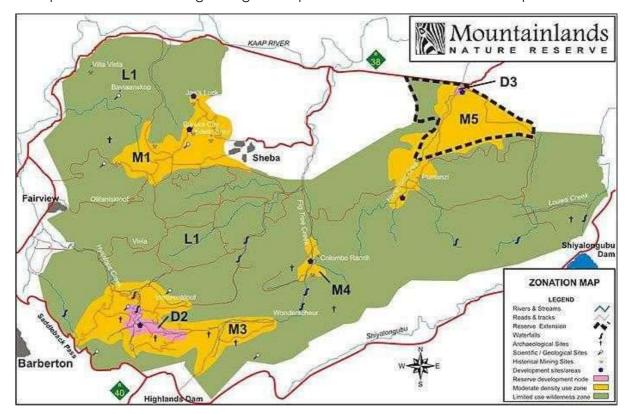


Figure 15: Mountainlands Reserve 2005 (<a href="https://www.mountainlands.co.za">https://www.mountainlands.co.za</a>)



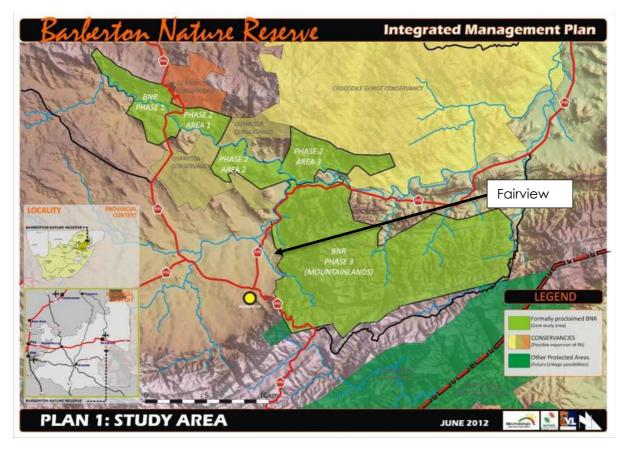


Figure 16: Barberton Nature Reserve: Development Phases (MTPA, 2012)

## 3.5 Other relevant Legislation

In addition to the Laws and Guidelines discussed above, Table 7 summarises some of the other key legislation and guidelines relevant to this application:

Table 7: Other Relevant legislation and guidelines

| APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT  | HOW THIS DEVELOPMENT COMPLIES WITH THE LEGISLATION AND GUIDELINES   |
|---|---|
| NEMA: Public Participation Guidelines (GNR807).   |   |
| Department of Environmental Affairs (2017), Public Participation guideline in terms of NEMA EIA Regulations, Department of Environmental Affairs, Pretoria, South Africa. | Guidelines will be followed during the Public Participation Process (PPP).  |
| DEA (2017), Guideline on Need and<br>Desirability, Department of Environmental<br>Affairs (DEA), Pretoria, South Africa   | The Guideline was and will continue to be considered in assessing the need and desirability of the Project aspects. |
| Department of Environmental Affairs,<br>Department of Mineral Resources,  | The Mining and Biodiversity Guideline is considered and acknowledged, especially in                                 |



| APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT  | HOW THIS DEVELOPMENT COMPLIES WITH THE LEGISLATION AND GUIDELINES  |
|---|--|
| Chamber of Mines, South African Mining and Biodiversity Forum, and South African National Biodiversity Institute. 2013. Mining and Biodiversity Guideline: Mainstreaming biodiversity into the mining sector. Pretoria. | light of the overlap of the Fairview MRA and the BNR.  |
| The draft National Guideline on minimum information requirements for preparing EIAs for mining activities that require environmental authorisation  | The Guideline was specifically followed in the compilation of this Report and will also apply to the EIA Report  |
| Spatial Land Use and Management Act, 2013 (Act No. 16 of 2013) (SPLUMA)   | SPLUMA aims to develop a framework to govern planning permissions and the lawful use of land. In terms of SPLUMA Barberton Mines should ensure that the surface rights areas where mining is undertaken, is approved as such.  |
| Restitution of Land Rights Act, 1994, the Land Reform (Labour Tenants) Act, 1996 and the Extension of Security of Tenure Act, 1997.   | Consultation with the Land Claims Commissioner has confirmed that there are land claims on the affected properties. The Claimants will be included in the I&AP database and the Mine will consult with the land claimants throughout the project.  |
| Local Government Municipal Systems Act, 2000 (Act No. 32 of 2000) as amended  | The Act requires local government to compile spatial development framework (SDF) which must include the provision of basic guidelines for a land use management system for the municipality. The objectives of an SDF are to promote sustainable functional and integrated human settlements, maximise resource efficiency, and enhance regional identity and unique character of a place. In addition, Municipalities are required to develop Integrated Development Plans (IDPs) which is a government co-ordinated approach to planning that seeks to ensure the economic and social enhancement of all within their jurisdiction. It provides a land use framework, considers infrastructure development, and the protection of the environment. The proposed project in relation to the relevant SDF is discussed in section 3.4.2. |



| APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT   | HOW THIS DEVELOPMENT COMPLIES WITH THE LEGISLATION AND GUIDELINES  |
|--|--|
| Development Facilitation Act, 1995 (Act<br>No. 67 of 1995) (DFA)   | The Act promotes the integration of the social, economic, institutional & physical aspects of land development and also promotes integrated land development in rural & urban areas in support of each other.  |
|  | The Act encourages the availability of residential & employment opportunities in close proximity to or integrated with each other, while optimising the use of existing resources including such resources relating to agriculture, land, minerals, bulk infrastructure, roads, transportation and social facilities.  The proposed projects pertain to continuation of activities at the existing Fairview Mine, which is associated with its own residential facilities and is located close to Barberton. The projects will result in continuation of employment at Fairview Mine, and optimises the use of |
|  | resources (including the historic dumps) within the Fairview MRA.  |
| NEMA Regulations pertaining to the financial provision for prospecting, exploration, mining or production activities (GNR1147 –20 November 2015) (as amended). | Financial Provision will be calculated and will be provided for by means of one of the approved mechanisms prescribed by the Financial Provision Regulations 2015 (or the 2019 Regulations if these are promulgated by the time the provision is calculated). This will be assessed during the EIA Phase.  |
| National Road Traffic Act, Act No. 93 of<br>1996 (NRTA) and National Land Transport<br>Act, Act No. 5 of 2008 (NLTA)   | These Acts relate specifically to the planning and development of transport systems and the safe use of roads. The project will not directly affect any public roads after conclusion of the construction phase, other than those roads already used by Fairview Mine employees and contractors.   |



## 4 Need and Desirability

Department of Environmental Affairs (DEA) published an updated Integrated Environmental Management Guideline on Need and Desirability in 2017.

According to these guidelines, the consideration of "need and desirability" in EIA decision-making requires the consideration of the strategic context of the proposed Project along with the broader public interest and societal needs. Furthermore, the development must not exceed ecological limits and the proposed actions must be measured against the short-term and long-term public interest to promote justifiable social and economic development.

The latest Guideline Document on the assessment of Need and Desirability (DEA, 2017) includes a number of questions, the answers to which should be considered in the EIA Process. These questions (as per the Guideline) have been summarised and grouped and answers to each are presented in Table 8.



Table 8: Need and Desirability Motivation

| Theme   | Specific Questions   | Answer related to this Application   |
|---|--|--|
| rces"   | How will this development (and its separate elements/aspects) impact on the ecological integrity of the area?                                    | This will be determined in the EIA Process through the specialist terrestrial biodiversity and freshwater ecology assessments.   |
| tural resou   |  | The state of ecosystems, biodiversity areas and conservation targets will be evaluated in the biodiversity assessments undertaken as part of the EIA Process. These will be assessed on a desktop-level first and verified on site.  |
| nd use of nat   | How were the following ecological integrity  | The historic dumps targeted for reclamation are located in a Protected area. The site of the proposed new TSF overlaps with areas identified as CBAs as identified in the Mpumalanga Biodiversity Conservation Plan (Ferrar & Lotter, 2007), despite this being the site of the old Bramber TSF.   |
| opment a  | considerations considered?  Threatened and sensitive Ecosystems  Critical Biodiversity Areas (CBAs) and Ecological                               | The historic dumps targeted for reclamation are located in Barberton Montane Grassland, which is regarded as vulnerable, but is well protected with a conservation target of 27% (Mucina & Rutherford, 2006).  |
| " Securing ecological sustainable development and use of natural resources" | Support Areas (ESAs)  Conservation targets   | The eastern half of the proposed TSF site is located in the Kaalrug Mountain Bushveld of the Lowveld Bioregion in the Savanna Biome, which is classified as least threatened with a conservation target of 24% (Mucina & Rutherford, 2006). The western half of the proposed TSF site falls on Legogote Sour Bushveld which is endangered with a conservation target of 19% and is poorly protected (Mucina & Rutherford, 2006). Given the nature of the site (reclaimed TSF footprint) it is not representative of the original vegetation types and cannot contribute to the conservation targets. |
|   | How does the proposed development respond to the relevant framework documents? Environmental Management Framework, Spatial Development Framework | The Proposed Project Activities are within an approved Mining Right Area and/or the existing Fairview Mine Surface Rights Areas. Alignment with municipal planning tools is further discussed in Section 3.4 of this report.   |



| Theme  | Specific Questions   | Answer related to this Application   |
|--|--|--|
|  | Global and international responsibilities relating to the environment (e.g. RAMSAR sites, Climate Change, etc.).   | The site is adjacent to the Barberton-Makhonjwa Mountains UNESCO World Heritage Site. This aspect is further addressed in Section 3.3.5 of this report.  The site is not located in close proximity to any RAMSAR Sites, the closest being the Verloren Valei Nature Reserve more than 100km north-west of the site.   |
|  | How will this development disturb or enhance ecosystems and/or result in the loss or protection of biological diversity, or pollute or degrade the biophysical environment? What measures were explored to avoid negative impacts, or minimise and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts? | A comprehensive impact assessment process has been commissioned. This question can't be comprehensively addressed at this early stage of the project.  It can be concluded at this stage the proposed new TSF will be at the footprint of the old Bramber TSF that has been reclaimed, and thus presents a brownfields development. The proposed reclamation of material from the historic dumps is expected to enhance ecosystems in the long run to at least some degree, as the material on these dumps are potentially causing pollution (at least siltation of affected watercourses).  Detailed management and mitigation will be explored in the EIA Phase and incorporated into the updated EMP. |
| de<br>to<br>no<br>an<br>of<br>Ho<br>lar<br>na<br>exp | What waste will be generated by this development? What measures were explored to firstly avoid waste, and where waste could not be avoided altogether, to minimise, reuse and/or recycle or to safely treat and/or dispose of unavoidable waste?   | Fairview Mine generates general (domestic) waste, hazardous waste and mineral waste. These will continue to be managed according to the provisions of the Mine's approved EMP.  A waste classification has been commissioned to address mineral waste associated with the proposed new TSF, to ensure the facility is designed and constructed (and operated) to contain waste adequately.   |
|  | How will this development disturb or enhance landscapes and/or sites that constitute the nation's cultural heritage? What measures were explored to avoid these impacts or minimise and remedy (including offsetting) the impacts?   | A heritage impact assessment has been commissioned as part of the EIA Process, which will include a desktop palaeontological assessment.  Management measures will be identified as part of the study.  The historic dumps that are targeted for reclamation are older than 60 years and thus all protected in terms of the NHRA.  |



| Theme | Specific Questions  | Answer related to this Application   |
|-------|---|--|
|       | What measures were explored to enhance positive impacts?  |  |
|       | How will this development use and/or impact on natural resources? What measures were explored to ensure responsible and equitable use of the resources? How have the consequences of the depletion of resources been considered? What measures were explored to avoid these impacts or minimise and remedy (including offsetting) the impacts? What measures were explored to enhance positive impacts? | The proposed new TSF will not occupy significant additional land but rather be situated at the site of the old TSF. Water resources are used in processing and resultant tailings deposition and the use of process water will be maximized with the use of clean water being avoided as far as possible.  The proposed reclamation involves the exploitation of mineable gold remaining in the historic dumps by mechanical means. Resource use is minimal and limited to equipment use (diesel) and water requirements of personnel.  Fairview Mine exploits gold reserves remaining within their MRA in line with the objectives of the MPRDA. Once the reserves are depleted, the Mine will have to close down, which will be associated with job losses and negative economic impacts, though some ecological improvements will be realized through rehabilitation of affected areas (starting with recovery of historically dumped materials). |
|       | Does the proposed development exacerbate the increased dependency on increased use of resources to maintain economic growth or does it reduce resource dependency? Do the proposed location, type and scale of development promote a reduced dependency on resources?   | The project does not exacerbate or reduce resource dependency, but addresses a demand for the exploitation of gold. The location of the reserves dictates the Mines location, type and scale.  |
|       | Does the proposed use of natural resources constitute the best use thereof? Is the use justifiable when considering intra- and intergenerational equity, and are there more   | The area holds numerous natural resources, including mineral resources that Fairview Mine aims to capitalise on, and ecological, scenic and geological resources valuable to the tourism sector in the area. It is believed that through proper management, all of these resources can be used optimally, as further discussed in section 5.7 of this report.  |



| Theme | Specific Questions   | Answer related to this Application   |
|-------|--|--|
|       | important priorities for which the resources should be used?   |  |
|       | How were a risk-averse and cautious approach applied in identifying and assessing impacts?   | The impact assessment methodology is described in section 8.1. Where information is lacking the precautionary approach is implemented.   |
|       | What are the limits of current knowledge and the risks associated therewith?   | Knowledge gaps and assumptions are further discussed in section 10 of this report.   |
|       | How will the ecological impacts of this development impact on people's environmental rights?   | This will be addressed in the Impact assessment. On a preliminary basis, the project will not infringe on people's environmental rights as measures will be put in place to ensure people's right to an environment that is not harmful to health and safety is not threatened by this project.  |
|       | Considering the need to secure ecological integrity and a healthy biophysical environment, describe how the alternatives identified resulted in the selection of the "best practicable environmental option" | Reclamation of the material from the historic dumps, even though these are located in a nature reserve, is expected to improve the ecological integrity of the area in the long term, by removing historic mineral waste deposits from this area, it is possible to restore natural drainage lines and vegetation.  Alternatives are discussed in section 5. |



| Theme  | Specific Questions  | Answer related to this Application   |
|--|---|--|
| " promoting justifiable economic and social development" | What is the socio-economic context of the area in terms of:  The IDP and any other strategic plans, frameworks of policies applicable to the area, Spatial priorities and desired spatial patterns; Existing land uses, planned land uses, cultural landscapes etc.  Municipal Economic Development Strategy ("LED Strategy")   | The Fairview Mine is indicated in the Umjindi Municipality's IDP and SDF, though these documents are somewhat redundant after incorporation of the Umjindi Local Municipality into Mbombela Municipality. The Mbombela Municipality IDP also acknowledges the contribution of mining to employment.  The existing Fairview Mine is recognised in the SDF, while the Nature reserve is also acknowledged. The SDF does not comment on the conflicting land uses adjacent to and overlapping one another.  |
|  | Considering the socio-economic context, what will the socio-economic impacts be of the development (and its separate elements/aspects), and specifically also on the socio-economic objectives of the area?  Will the impact be socially and economically sustainable in the short- and long-term?  | The socio-economic sustainability of the project will also be assessed in the EIA-Phase. At this early stage of the Project, it is confirmed that the proposed new TSF is required to ensure continued production (and associated employment) at Fairview Mine.  |
|  | In terms of location, describe how the placement of the proposed development will result in the creation of residential and employment opportunities in close proximity to or integrated with each other, reduce the need for transport of people and goods result in access to public transport or enable non-motorised and pedestrian transport compliment other uses in the area | The reclamation project location depends on the location of historic dumps containing viable gold that can be recovered.  The location of the proposed new TSF was determined based on the location of the original Bramber TSF and Bramber TSF extension, as the location is operationally suitable and has already been disturbed (it is thus preferable to constructing a new TSF on a new, greenfields site).  The project is associated with the retention of employment opportunities and is situated in close proximity to existing residential areas (such as Barberton and Verulam), where unemployment is very high. |



| Theme | Specific Questions  | Answer related to this Application   |
|-------|---|--|
|       | be in line with the planning for the area optimise the use of existing resources and  | The Project will implement a local procurement policy and source employees and supplies locally, where the required skills and goods are available locally.  |
|       | infrastructure  | At least some mine employees access the mine using public transport.   |
|       | contribute to the correction of the historically distorted spatial patterns of settlements and to the optimum use of existing infrastructure in   | The proposed reclamation sites are within an existing MRA and the proposed Fairview TSF site is associated with the existing Fairview Mine Main surface infrastructure area. The wider area is well-known for various gold mines.  |
|       | excess of current needs, encourage environmentally sustainable land   | The project optimizes the use of existing mining and processing infrastructure at Fairview Mine.   |
|       | development practices and processes the investment in the settlement or area in   | The project optimises the use of existing disturbed footprint areas and existing roads.  |
|       | question will generate the highest socio-<br>economic returns   | Investment in local settlements forms part of the Mine's Social and Labour Plan (SLP).   |
|       | impact on the sense of history, sense of place<br>and heritage of the area and the socio-cultural<br>and cultural-historic characteristics and<br>sensitivities of the area   | The sense of history of the Barberton area is strongly associated with the history of gold mining. A heritage and archaeological impact assessment have been commissioned as part of the EIA process.  |
|       | in terms of the nature, scale and location of the development promote or act as a catalyst to create a more integrated settlement?  |  |
|       | What measures were taken to pursue environmental justice and equitable access to environmental resources, benefits and services so that adverse environmental impacts shall not be distributed so as to unfairly discriminate against any person, (who are the beneficiaries and is the development located appropriately)? | The primary beneficiaries of the Fairview Mine and thus the Project are considered to be the employees of BML. The Fairview Mine Village and Hostels house employees at the Mine and therefore beneficiaries and affected parties are in this case one in the same. The other primary affected party is expected to be the BNR, who will benefit in the long term from the proposed reclamation activities as this will improve the ecological integrity of these areas, which are located within the BNR. |



| Theme | Specific Questions  | Answer related to this Application  |
|-------|---|---|
|       | What measures were taken to meet basic human needs and ensure human wellbeing, and what special measures were taken to ensure access thereto by categories of persons disadvantaged by unfair discrimination? | The Mine's SLP programmes must contribute to meeting basic human needs. The specialist studies, specifically the groundwater and surface water studies will ensure that the mine's activities do not adversely affect the basic human or ecological water requirements. |
|       | What measures were taken to ensure that the responsibility for the environmental health and safety consequences of the development has been addressed throughout the development's life cycle?                | The mine will be operated in strict accordance with the Mine Health and Safety Act, which is beyond the scope of the EIA process and beyond the expertise of the EAP.   |
|       | What measures were taken to: ensure the participation of all interested and affected parties,   | A comprehensive public participation process (PPP) will be associated with all phases of the EIA Process. The PPP is guided by the EIA Regulations, 2014 (as amended).  |
|       | provide all people with an opportunity to develop the understanding, skills and capacity necessary for achieving equitable and  | Extensive consultation with interested and affected parties (I&APs) is planned and will be undertaken with authorities, local land owners, communities and interest groups.   |
|       | effective participation, ensure participation by vulnerable and disadvantaged persons   | Public Participation will be undertaken to ensure the opportunity for all potential I&APs to participate in meetings and the EIA process. PPP documentation will be made available in English and Siswati. The reports  |
|       | ensure openness and transparency, and access to information in terms of the process,  | themselves will be compiled in English. Public meetings (open days / discussion forums) will be presented in English and will also involve a translator to Siswati.   |
|       | ensure that the interests, needs and values of all interested and affected parties were taken into account, and that adequate recognition were  | Documents for public review will be made available electronically (on the internet) and in hard copy. I&APs will be kept informed of the process and any developments / meetings / reports via e-mail and SMS communication.  |
|       | given to all forms of knowledge, including traditional and ordinary knowledge   | I&AP comments will be incorporated in to the reports, and into the comment and response report (CRR) along with the EAP's response to each comment or   |



| Theme | Specific Questions   | Answer related to this Application  |  |  |
|-------|--|---|--|--|
|       |  | question. This process ensures that all I&AP comments are addressed in the Scoping and EIA Reports and incorporated into the studies.   |  |  |
|       | Considering the interests, needs and values of all the I&APs, describe how the development will allow for opportunities for all the segments of the community (e.g. a mixture of low-, middle-, and high-income housing opportunities) that is consistent with the priority needs of the local area (or that is proportional to the needs of an area)? | The area currently has somewhat conflicting development needs and spatial priorities, in that the project area is within an existing and approved MRA, and also partly within and adjacent to an existing Nature Reserve.  I&APs associated with the nature reserve are expected to oppose the proposed reclamation activities and the proposed new TSF development, while it is expected that local communities, especially those community members employed at Fairview Mine, will welcome the project as it is aimed at continuing activities at Fairview Mine and sustained employment. Furthermore, the sites of the historic dumps, while officially within the Nature Reserve, are associated environmental liabilities, which the implementation of the |  |  |
|       |  | reclamation could address to a large degree, as the sites will have to be rehabilitated in line with current mining and environmental legislation once reclamation is concluded. This will mean that the area will be restored to viable wilderness area, where it can contribute to the nature reserve, where in its current state the site cannot be logically incorporated into the nature reserve due to ecological degradation and unsafe conditions associated with the previous mining activities.   |  |  |
|       | What measures have been taken to ensure that workers will be informed of work that might be harmful to human health or the environment or dangerous, and what measures have been taken to ensure that the right of workers to refuse such work will be respected and protected?  | An environmental awareness training program will be developed as part of the EIA phase. Additionally, the mine will be operated in strict accordance with the mine health and safety act.   |  |  |



| Theme | Specific Questions   | Answer related to this Application  |  |  |
|-------|--|---|--|--|
|       | Describe how the development will impact on job creation in terms of, amongst other aspects: the number of temporary versus permanent jobs that will be created whether the labour available in the area will be able to take up the job opportunities (i.e. do the required skills match the skills available in the area) the distance from where labourers will have to travel the location of jobs opportunities versus the location of impacts (i.e. equitable distribution of costs and benefits), and the opportunity costs in terms of job creation (e.g. a mine might create 100 jobs, but impact on 1000 agricultural jobs, etc.). | The project will be associated with the retention of employment by enabling the continued operation of Fairview Mine, as well as creation of some temporary and permanent employment opportunities (See Section 2.4.10). More clarity regarding the availability of local and appropriate skills will be gained in the EIA and PPP, however the area has a long history of mining and it is expected that many of the required skills will be available locally. The mine implements a strict local procurement policy, thereby ensuring minimal travel distances between the labour force's current homes and the Fairview mine.  The communities closest to the mine will be most directly impacted by the proposed projects, and should be evaluated for the availability of appropriate skills before advertising such job opportunities further afield, to ensure that the communities that are most affected, also benefit the most from the proposed project. Furthermore, the Mine's SLP should focus on the upliftment of the communities closest to the Mine, in consultation with the relevant authorities. Opportunity costs in terms of job creation: Mining is generally more labour intensive than conservation-related land uses and in this case not mutually exclusive as the Project will likely retain existing jobs in the mining industry (at the existing Fairview Mine) without adversely affecting existing employment at the BNR. |  |  |
|       | What measures were taken to ensure: that there were intergovernmental coordination and harmonisation of policies, legislation and actions relating to the environment, and   | The scoping report contains a comprehensive discussion on the relevant legislative framework, looking at national, provincial and local legislation pertaining to land uses, mining, environmental management and conservation.  Various government departments at different levels were also informed of the proposed project and requested to participate in the PPP.   |  |  |



| Theme | Specific Questions  | Answer related to this Application  |  |  |
|-------|---|---|--|--|
|       | that actual or potential conflicts of interest<br>between organs of state were resolved through<br>conflict resolution procedures?  | Conflict between authorities tasked with the promotion of conservation and tourism and authorities tasked with the sustainable development of mineral resources is expected. Consultative meetings will be held early in the application process with these authorities in an attempt to come to an agreement / understanding regarding the Project development henceforth.   |  |  |
|       | What measures were taken to ensure that the environment will be held in public trust for the people, that the beneficial use of environmental resources will serve the public interest, and that the environment will be protected as the people's common heritage?   | The EIA process, and development of the Environmental Management Plan (EMP) aims to achieve environmental protection (where relevant) and restoration of the environment. A closure and rehabilitation plan will be compiled in the EIA phase.  |  |  |
|       | Are the mitigation measures proposed realistic and what long-term environmental legacy and managed burden will be left?   | Mitigation measures will be defined and refined in the EIA process, proportionate to the significance of the Impacts that are anticipated. It is expected that the new TSF will remain on site indefinitely, while the project also proposes to remove dumps remaining within the MRA from historic mining activity. The reclamation project therefore contributes to reduced long-term liability while the proposed new TSF will be associated with long-term management burden at least to some degree.  Long-term environmental legacy and management options will be identified and assessed in the EIA phase, and as part of the rehabilitation and closure plan and financial provision report. |  |  |
|       | What measures were taken to ensure that the costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimising further pollution, environmental damage or adverse health effects will be paid | This matter will be addressed in the rehabilitation, closure and financial provision report, which will be compiled as part of the EIA process and which the mine has to update on an annual basis, to ensure the availability of sufficient funds, to implement rehabilitation plans.  |  |  |



| Theme | Specific Questions                       | Answer related to this Application |
|-------|--|------------------------------------|
|       | for by those responsible for harming the |                                    |
|       | environment?                             |                                    |



#### 5 Evaluation of Alternatives

Meaningful consideration should be given to alternative processes or practices which can be employed to meet the requirements of mine development, operation and closure (DEA, 2018).

Consideration of alternatives is one of the most critical elements of the environmental assessment process (DEAT, 2004). Key criteria that must be considered when identifying alternatives are that they should be "practicable, feasible, relevant, reasonable and viable".

The location of mining activities is, in general terms, dictated by the location of viable mineral resources. The Applicant undertakes prospecting activities within their Mining Right Areas on a continuous basis, to look for viable reserves and extend the Life of Mine at Fairview, in their own economic interest and in the interest of retaining employment at the Mine. Sufficient resources remain at Fairview to continue mining, however, the existing TSFs are nearing capacity; production cannot continue unless a feasible solution to dispose of mineral waste resulting from processing is in place.

Various alternatives are still considered in terms of the proposed new TSF, including:

- Whether to construct a new TSF to handle continued generation of Tailings, or to stop production at Fairview Mine (the No-Go Option);
- Alternative TSF locations;
- Alternative processing technologies will give rise to different types of tailings material, that can be managed in different ways, (Alternative technology);
- The deposition rate and methods to dispose of tailings onto the TSF can be evaluated;
- Location and nature of ancillary and support infrastructure (return water dam, stormwater controls etc.);
- Alternative means of TSF construction: the material that is available from the reclaimed Bramber TSF (where the new Fairview TSF is proposed) is not sufficient to facilitate the construction of the Fairview TSF Starter Walls. Alternative locations and means of obtaining construction material are investigated.

For the proposed dump reclamation, location alternatives cannot be assessed as the dumps are existing. However, access routes to the dumps can be evaluated. Additionally, the Mine can consider to mine only some of these dumps and exclude others, or exclude this aspect of the proposed project entirely (the No-Go Option).

This section discusses the various alternatives that have been considered by the Applicant, and explains how the Applicant decided on the proposed option.

## 5.1 Process to assess alternatives

The concept of an "alternative" can be defined as a possible course of action, in place of another, that would meet the same purpose and need as the development proposal. The starting point for the identification and evaluation of alternatives to the proposed Project is the clear identification of the purpose and need for the Project, which is twofold:

The purpose of the proposed new TSF is to provide additional tailings storage capacity
at Fairview Mine, so as to facilitate continued production. The project need primarily
relates to mining and processing of Gold to meet market demand, the objectives of



the MPRDA and ensure a viable business for BML's continued operations (including retention of employment opportunities).

• The purpose of the proposed reclamation is firstly to supplement the mine's gold production, and also to reduce their financial liability for rehabilitation.

DEA (2018) identifies six potential categories of alternatives and emphasises that "the number of alternatives that are selected for an assessment should be determined by the range of potential alternatives that could be reasonable and feasible" (DEA, 2018). The alternatives that have been considered are discussed in these terms and grouped according to the six categories defined by DEA.

## 5.2 Property or Location

The location of the proposed reclamation activities is dictated by the location of the historical dumps targeted for reclamation. To access the dumps, pre-existing roads and tracks are used where feasible, the extremely mountainous terrain in this area influences the route possibilities.

The proposed new TSF is to be located at the footprint of the original Bramber TSF and the original Bramber TSF expansion, and abuts the existing BTRP/New Bramber TSF. The location was chosen due to the following primary considerations:

- The site previously contained a TSF, so the construction of a new TSF will be in keeping with the expectation of receptors.
- The original Bramber TSF and Bramber TSF expansion have recently been reclaimed; the site does not contain any vegetation or topsoil (topsoil was stripped prior to the original TSF construction and stockpiled), except for a small strip of land between the site of the original Bramber TSF and the current BTRP/New Bramber TSF. The site is also already relatively flat due to the reclamation of the previous TSF and site preparation requirements will be minimal.
- The site is in close proximity to the Processing plants that generate the tailings. Placing the new TSF on another site will have additional implications for pumping of tailings to the new TSF.

As the other older TSFs at Fairview Mine (Harper, Moon, Bramber) are also targeted for reclamation, and being reclaimed, these footprints will also become available in future. Continued production at Fairview Mine will cause the continued generation of tailings and these footprints are potentially ideal for development of additional new TSFs in future.

Suitable structural fill material will have to be sourced for the construction of the Fairview TSF starter embankment. Available material from the Old Bramber TSF footprint can be used, however the mass balance has not yet been finalized and it is unclear whether this material will be enough. The Mine could consider purchasing and importing this material from another approved mining operation; however, this is likely going to be associated with excessive costs. The Mine proposes rather to source material from the reclaimed TSF footprint areas where material will need to be removed as part of rehabilitation of these footprints and base preparation for the establishment of the new T=Fairview TSF.



## 5.3 The type of activity

The proposed project relates to two separate activity types: 1) the reclamation of historic dumps and 2) the construction of the new TSF.

The reclamation of material from historic dumps, and re-processing of this material in the existing processing plants at Fairview, holds significant benefit in that the activity will contribute to the Mine's gold production, while at the same time eliminating the environmental liabilities and pollution threats caused by the historically dumped material.

Continued gold production inevitably leads to continued generation of tailings material, which has to be disposed of. It may be considered to pump tailings underground to mined-out areas but the environmental implications of such action, especially on groundwater, is uncertain and potentially very significant, and therefore assumed to be unacceptable. The proposed new TSF is the only viable and legal option for tailings deposition.

## 5.4 Design and/or Layout

Mine layout refers to the mining scheduled and the corresponding location of mine disturbances to implement the mine schedule (DEA, 2018). The layout and scheduling of the mining operation is existing and was influenced by a number of factors including:

- Location, depth and grade of the ore body;
- Location and nature of overburden material; and
- Acceptable deposition rates onto the TSFs (considering allowable rate of rise).

Alternative TSF designs were considered by the Engineering team, however the best available technology and accepted design principles were implemented in the TSF design in line with best practice.

#### 5.5 Technology Used

Alternative technologies may refer to alternative mineral processing/beneficiation methods and/or alternative pollution control methods, including waste management methods. Alternative technology is not truly relevant to the proposed activities:

- The processing facilities at Fairview will continue to operate as approved;
- best available technology will be used to convey tailings from the plant to the proposed new TSF, and the TSF will be operated according to the best available technologies in terms of water reticulation, retention of dirty water, diversion of clean water and rehabilitation;
- The historic dumps will be reclaimed via mechanical methods as this is the most viable method, and trucked to the processing plants. Consideration may be given to the construction of conveyors or aerial cable-ways but considering the limited resources remaining in the historic dumps and the relatively short time-frame associated with their reclamation, such options are not considered feasible.

#### 5.6 Operational Aspects

These are dependent on the type of operation but may include:



- Operating hours and designating set times for specific activities.
- Setting specific traffic control mechanisms for mine vehicles and routes.
- Dust control methods such as the use of chemical dust suppressant on mine roads.

The operational hours for mining at Fairview are based on two shifts per day on a five-day production work week. It is proposed to align the reclamation activities with these operational hours.

It is also proposed that TSF construction activities are restricted to daylight hours.

The Plant at Fairview is operational 7 days per week, 24 hours a day (three shifts per day). Once complete, tailings deposition to the proposed new TSF will be 24 hours a day, 7 days per week.

Specific traffic control methods will be implemented, for safety reasons, on the routes to and from the proposed reclamation activities. The routes must be surfaced with gravel in specific areas to reduce dust generation and erosion. Dust suppression via watering cart is recommended on those road areas where dust is significant. Reclamation footprints where vegetation has been removed will also be sprayed with water to control dust emissions until reclamation is complete and rehabilitation (re-vegetation) implemented.

Specific dust control methods will be recommended in the air quality impact assessment commissioned as part of the EIA. Similarly, pollution control methods with specific reference to surface- and groundwater management will be addressed in the EIA in the respective specialist studies.

## 5.7 No-Development Option

The No-development option will be evaluated separately for the project components:

#### 5.7.1 The option of not constructing the new TSF

If no additional tailings deposition capacity is provided for at Fairview Mine, production will have to cease. This implies that the beneficiation plants at Fairview Mine will close down, with all the associated job-losses and economic implications. This could also lead to a complete cessation of mining and closure of the entire Fairview mining operation, as it will be too costly to transport Run of Mine ore to another processing facility. This will also be contrary to the objects of the MPRDA and Mining Charter which promotes on-site and local beneficiation at Mines.

The no-go option has far-reaching implications for the Mine as a whole and is not considered optimal or realistic at this point.

The proposed new TSF is located on the footprint of the old Bramber TSF and will not affect any undisturbed areas that may be of conservation importance. It is proposed to incorporate these properties over which BML holds the surface rights into the Fairview MRA to ensure that one comprehensive and over-arching EMP will apply to the mining and processing (including deposition of mineral waste) activities at Fairview Mine.

#### 5.7.2 The option of not reclaiming the historic dumps

In this scenario, the status quo would prevail and the material that was historically dumped throughout the MRA would remain in place. Some of these dumps are located immediately adjacent, or within watercourses, and are undoubtedly causing siltation of these systems. If



these dumps are not reclaimed, pollution emanating from these dumps will continue to affect downstream surface water resources (and potentially groundwater). The visual impact of these dumps would remain indefinitely.

The historical dumps are not accounted for in the Mine's latest quantum of financial provision for rehabilitation. This material was deposited within the MRA historically by unknown persons over many years. The dumps are located within the MRA, however, BML does not hold the surface rights over these areas. Assigning responsibility for their management is therefore not clear-cut. However, as Fairview Mine can derive economic benefit from reclaiming this material, it is considered mutually beneficial to the Mine and the surface rights holder (Barberton Nature Reserve) that the reclamation be allowed to continue.

It is unlikely that the surface rights holder will ever rehabilitate these areas and if the no-go option is implemented, the dumps will remain within the nature reserve area in perpetuity.

## 6 Public Participation

The latest Public Participation Guideline in terms of the NEMA was published by the Department of Environmental Affairs in 2017 (DEA, 2017). The NEMA requires the participation of all Interested and Affected Parties (I&APs) in environmental governance (Section (2)(4)) and holds that the beneficial use of environmental resources must serve the public interest. Decisions that may affect the environment, have to include sufficient opportunity for public participation.

The public participation process (PPP) aims to involve the authorities and I&APs in the project process; and determine their needs, expectations and perceptions. An open and transparent process was and will be followed at all times and is based on the reciprocal dissemination of information.

The PPP was designed to provide sufficient and accessible information to all I&APs in an objective manner to assist them to:

- Raise issues of concern and suggestions for enhanced benefits;
- Contribute local knowledge and experience; and
- Verify that their issues have been and will be captured.

The following steps comprise the PPP:

#### 6.1 Identification of Stakeholders

The DMR has been identified as the competent authority in this application as it relates to NEMA, NEMWA and the MPRDA.

A number of commenting authorities have also been identified and notified of the proposed project.

The I&AP database further includes occupiers and owners of the affected property and adjacent properties, the relevant municipal ward councillor, the local and district municipalities, and various organisations and interest groups.

Please refer to the PPP Report in Appendix D.



#### 6.2 Notification of Stakeholders

The I&APs that were identified as per the previous section of this report were notified of the proposed Project through the following means:

- Notice boards were displayed at the boundaries of the Fairview Mine in areas that are conspicuous and visible to the public.
- Notice Boards were also displayed at various locations in the town of Barberton.
- The notices referred to above were compiled and displayed in English and SiSwati and complied with the requirements of Regulation 41(3) & (4) of the EIA Regulations 2014, as amended.
- Advertisements were placed in English and SiSwati in the Lowvelder and in the Barberton Times Newspapers. The advert complied with the requirements of Regulation 41(3) of the EIA Regulations 2014, as amended.
- Written notice in the form of Background information documents (BID) were distributed to all occupiers, owners and persons in control of the site or portions of the site and adjacent farms, and the additional I&APs identified. The BID was distributed via e-mail, fax, post and hand delivery on site.

The abovementioned notification documents presented the following information to potential I&APs:

- Details of the application and EIA Process;
- The nature and location of the proposed project;
- Details of the EAP where further information can be obtained; and
- Details of the PPP that is associated with the EIA Process.

## 6.3 Public Participation Process to be undertaken

The PPP will comprise the following phases / steps:

- 1. Make the Scoping Report (this report) available in digital and hard copy to I&APs for review and comment.
- 2. During the comment period, host a scoping-phase public meeting to present the proposed project to I&APs, and gather their comments, thought and/or concerns. Incorporate I&AP comments into a final Scoping Report for submission to the DMR.
- 3. Once the DMR approves the Scoping Report (including the Plan of Study for EIA), compile the EIA Report and similarly make the Report available to I&APs for review and comment.
- 4. During the comment period, host an EIA-phase public meeting to present the findings of the specialist assessments and EIA to I&APs, and gather their comments. Incorporate I&AP comments into a final EIA report and EMP for submission to DMR.
- 5. Once the DMR approves the EIA and EMP, and communicates their decision to the Applicant, notify registered I&APs of the decision, reasons for the decision, and the appeal process that I&APs may follow if they do not agree with the decision or a part thereof.

Please refer to Appendix D for additional details and proof of the public participation undertaken to date.



## 7 Existing Site Attributes

A number of specialist assessments have been commissioned to form part of the EIA Process, as discussed in more detail in Section 9. This section of the report will therefore be expanded as the project progresses with information from the specialist assessments.

Just as a project is associated with certain impacts on the environment where it is undertaken, the existing environment can also influence a proposed development in terms of design, location, technology and layout. It is therefore important to define the environmental baseline conditions (status quo) or context of a proposed development site.

This Section describes the environmental attributes associated with the affected sites focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects. Information is presented on different scales as relevant to the information that is available:

- Regional Scale the areas, land uses and communities surrounding the Fairview Mining Right Area including in some cases the larger municipal area;
- The Fairview Mining Right Area; and
- Site-specific:
  - o The site proposed for the development of the new TSF; and
  - o The sites of the historic dumps that are targeted for reclamation.

## 7.1 Physical Environment

#### 7.1.1 Geology, physiography and topography

The mineralisation at Barberton Mines is classified as Achaean epigenetic hydrothermal lode gold deposits within a granite greenstone terrain. The distribution and localisation of these orebodies in the Barberton Greenstone Belt can be largely attributed to the combined influence of thermal metamorphism and structural deformation. The Barberton Greenstone Belt has produced approximately 11Moz of gold since gold was discovered in this goldfield in the early 1880s. Barberton Mines has produced more than 75% of the total production from the Barberton Greenstone Belt (http://www.panafricanresources.com/wp-content/uploads/Pan-African-Resources-integrated-annual-report-2019.pdf).

Greenstone Belts occur as belts of deformed volcanic and sedimentary strata and get their name from the presence of green minerals (Actinolite, amphiboles, Chromium muscovite "fuchsite", epidote, green chlorite and serpentine). These are among the oldest rocks in the world (http://www.mpumalangahappenings.co.za/barberton\_geology.htm).

The Barberton Greenstone Belt consist of the lowermost Onverwacht Group, the Fig Tree Group and the uppermost Moodies Group.

- The **Onverwacht Group** is characterised by ultramafic meta-volcanics overlain by an upper unit consisting of mafic and felsic meta-volcanics. The Swartkoppie Formation occurs at the top of the Onverwacht Group. This formation contains a fuchsitic-bearing carbonatized ultramafic schist, which is particularly significant as being the host of the gold mineralisation (Pretorius, 2018).
- Directly overlying the Onverwacht Group is the Fig Tree Group, a sequence of finegrained sedimentary rocks consisting of turbiditic greywackes, shales and banded iron formations (BIF). Although, volcanics and tuff flows are also present within the Fig Tree



- Group, mainly within the uppermost formation that overlies the lower sedimentary formations (Pretorius, 2018).
- Overlying the Fig Tree Group is the Moodies Group, an upward fining sequence of continental terrigeno-clastic sedimentary lithologies. The main lithologies occurring within this group are arenites, shales and jaspelite while minor units of amygdaloidal andesites are found in areas (Pretorius, 2018).

The Barberton Greenstone belt is one of the oldest and best exposed Archaean greenstone belts on Earth and is almost 3.5 billion years old (<a href="http://www.mpumalangahappenings.co.za">http://www.mpumalangahappenings.co.za</a>).

The Fairview Mine area straddles the contact between the Moodies Group to the north (Eureka Syncline) and the Fig Tree Group's greywacke and shale to the south (Ulundi Syncline). The contact is marked by the presence of the regionally identifiable Sheba Fault. The two synclines are refolded due to the immense force present during deformation, resulting in back-to-back isoclines that dip steeply to the south. Tight isoclinal, thrust fault-related anticlines of Onverwacht Group schist (Zwartkoppie Formation) occur within the greywacke of the Fig Tree Group <a href="http://www.panafricanresources.com/wp-content/uploads/Pan-African-Resources-MRMR-report-2018.pdf">http://www.panafricanresources.com/wp-content/uploads/Pan-African-Resources-MRMR-report-2018.pdf</a>. Please see Figure 17 and Figure 18



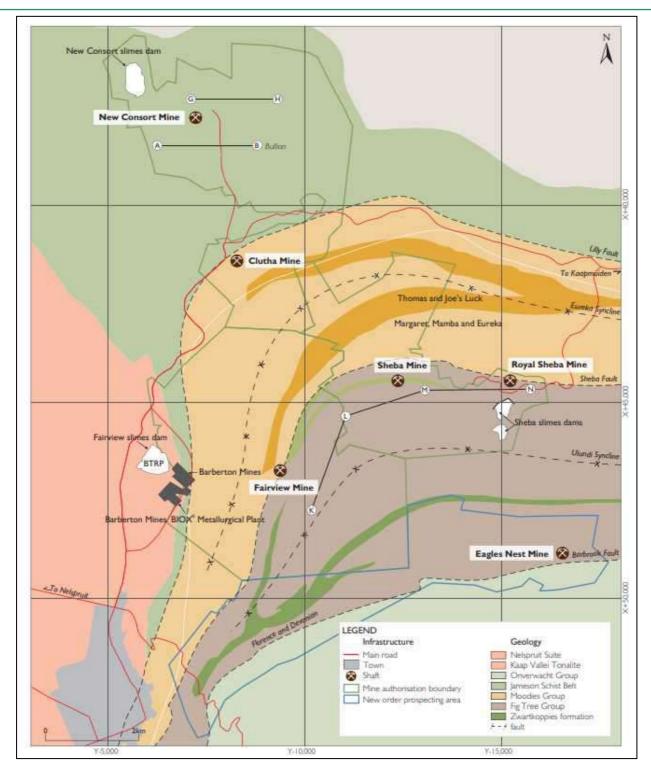


Figure 17: Geological Map – <a href="http://www.panafricanresources.com/wp-content/uploads/Pan-African-Resources-integrated-annual-report-2019.pdf">http://www.panafricanresources.com/wp-content/uploads/Pan-African-Resources-integrated-annual-report-2019.pdf</a>



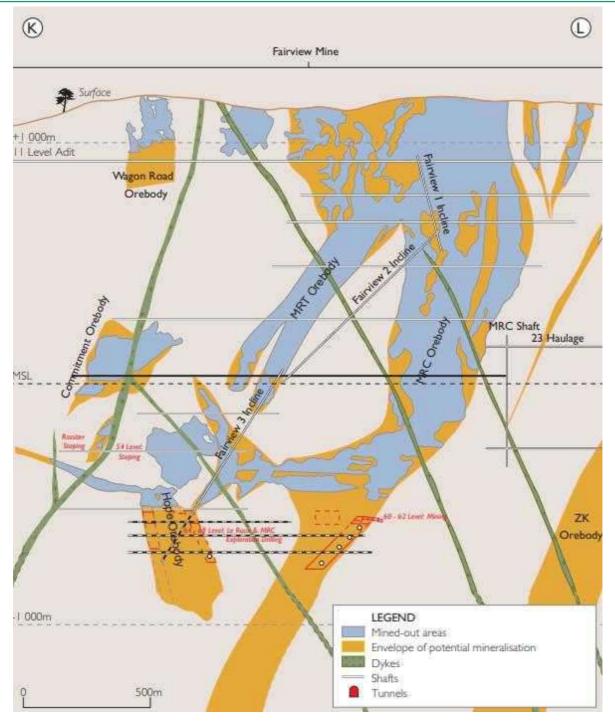


Figure 18: Geology at Fairview Mine <a href="http://www.panafricanresources.com/wp-content/uploads/Pan-African-Resources-MRMR-report-2018.pdf">http://www.panafricanresources.com/wp-content/uploads/Pan-African-Resources-MRMR-report-2018.pdf</a>

The proposed reclamation sites are located in extremely mountainous terrain. The following elevations pertain to each target dump (based on Google Earth):



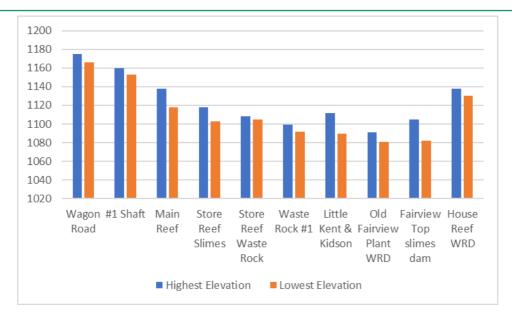


Figure 19: Topographic elevations of the target dumps

| Dump Name               | Highest Elevation | Lowest Elevation | Elevation difference |
|-------------------------|-------------------|------------------|----------------------|
| Wagon Road              | 1175              | 1166             | 9                    |
| #1 Shaft                | 1160              | 1153             | 7                    |
| Main Reef               | 1138              | 1118             | 20                   |
| Store Reef Slimes       | 1118              | 1103             | 15                   |
| Store Reef Waste Rock   | 1108              | 1105             | 3                    |
| Waste Rock #1           | 1099              | 1092             | 7                    |
| Little Kent & Kidson    | 1112              | 1090             | 22                   |
| Old Fairview Plant WRD  | 1091              | 1081             | 10                   |
| Fairview Top slimes dam | 1105              | 1082             | 23                   |
| House Reef WRD          | 1138              | 1130             | 8                    |

The proposed new TSF site ranges in elevation from approximately 652m to 680m and is located on relatively flat land, given the reclamation activities that have recently been undertaken there.

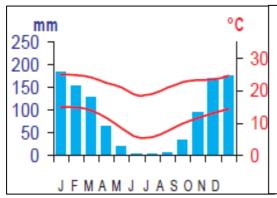
The regional topography is extremely mountainous, typical of the Barberton Mountains and associated river valleys. Slopes are generally quite steep varying between 12° to 35° (Van Der Merwe, August 2010).

## 7.1.2 Climate and meteorology

Fairview Mine is located in the Mpumalanga Lowveld where the climate is warm to hot with fairly high humidity in general, though cooler weather characterises the escarpment (Van Der Merwe, August 2010).



Mucina & Rutherford (2006) identified the reclamation projects as falling within the Barberton Montane Grassland, which generally occurs along the high-lying grassland areas at altitudes ranging from 760m in the north to 1640m in the south-west. The region experiences early summer rainfall concentrated from November to March. Mean Annual Precipitation varies between 950mm in the west to about 1,470mm in the east. Frost is infrequent and hot, dry winds are experienced from August to October. Please see Figure 20.



Mean Annual Precipitation: 1194mm

Annual Precipitation Coefficient of Variation: 16%

Mean Annual Temperature: 16.7°C

Mean Frost Days: 3 days

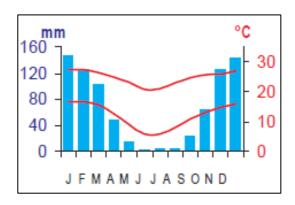
Mean Annual Potential Evaporation: 1779 mm

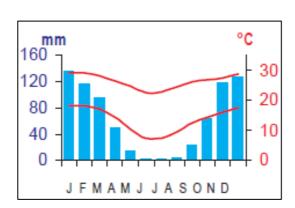
Mean Annual Soil Moisture Stress (% of days when evaporative demand was more than double the

soil moisture supply): 62%

Figure 20: Climate diagram for the Barberton Montane Grassland (Mucina & Rutherford, 2006)

The New TSF site is located over two regions defined by Mucina & Rutherford (2006), Legogote Sour Bushveld to the west and Kaalrug Mountain Bushveld to the east. These both also experience summer rainfall with dry winters. Key climatic information is shown in Figure 21.





Legogote Sour Bushveld:

Mean Annual Precipitation: 942mm

**Annual Precipitation Coefficient of Variation:** 

21%

Mean Annual Temperature: 18.4°C

Mean Frost Days: 2 days

Mean Annual Potential Evaporation: 1911 mm Mean Annual Soil Moisture Stress (% of days when evaporative demand was more than

double the soil moisture supply): 69%

Kaalrug Mountain Bushveld:

Mean Annual Precipitation: 894mm

Annual Precipitation Coefficient of Variation:

22%

Mean Annual Temperature: 19.8°C

Mean Frost Days: 1 days

Mean Annual Potential Evaporation: 1899 mm

Mean Annual Soil Moisture Stress (% of days when evaporative demand was more than

double the soil moisture supply): 70%



# Figure 21: Climate diagrams for Legogote Sour Bushveld and Kaalrug Mountain Bushveld (Mucina & Rutherford, 2006)

The prevailing wind direction is from the north east at an average speed of 3.6 m/s. The greatest frequency of wind occurs in September and October (with wind speeds exceeding 4m/s). The mountainous terrain causes the wind direction in the area to vary considerably. Day and Night-time wind roses are shown in Figure 22 (Van Der Merwe, August 2010).

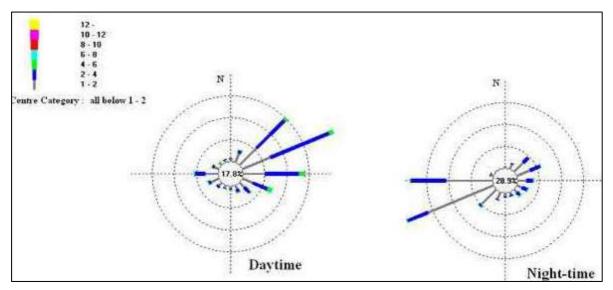


Figure 22: Day and Night Time wind roses for January 2007 to December 2008 (Van Der Merwe, August 2010)

# 7.1.3 Soils, land use and land capability

The Fairview MRA is mountainous with steep inclines, resulting in the presence of soils that are thin red-yellow apedal, freely drained, dystrophic to mesotrophic soils in which lime is rare to absent. On the steep slopes, which predominate in the area, abundant angular rock fragments occur (Van Der Merwe, August 2010).

Erosion potential in the mountainous areas is very low. At the flatter terrain to the west, where the proposed TSF site is located, erosion is also very low to moderate (Mucina & Rutherford, 2006). The approved EMP identifies the majority of the MRA (including the areas where the historic dumps are located) as containing soils with minimal development, usually shallow, on hard or weathering rock. The TSF site is located on red soils with high base status (Van Der Merwe, August 2010).

The following soil forms are generally found in the Barberton area:

- Low lying areas contain Hutton and Clovelly Soil forms. Hutton soil forms are 600 800 mm in depth while the Clovelly soil forms are 500 800mm in depth.
- Steep slopes contain Glenrosa and Mispah soil forms varying from 100 to 600mm in depth;
- Mountains contain Avalon soil forms ranging in depth from 400 to 600mm.



The South African National Biodiversity Institute (SANBI) describes the soils at the proposed TSF site as red soils with high base status, and the soils in the mountains as Soils with minimal development, usually shallow, on hard or weathering rock, with or without intermittent diverse soils, with Lime being rare or absent in the landscape (http://bgisviewer.sanbi.org).

The Chamber of Mines defines land capability classes as follows:

- Arable land has a soil depth exceeding 600mm;
- Grazing land has a soil depth between 250 600mm;
- Wilderness land has a soil depth less than 250mm; and
- Wetland land capability has clay soils.

In general terms, the mountainous areas will be regarded as predominantly wilderness and grazing potential. Soils in the valleys are deeper and may have limited agricultural potential. The proposed new TSF is located on the site of the reclaimed Bramber TSF, from where topsoil was stripped and stockpiled. The stockpiles remain on site currently and are available for use in rehabilitation where needed.

The Mpumalanga Conservation Plan identifies the mountainous areas as non-arable, with grazing potential varying from low in the higher-lying areas, to low-moderate in the lower lying areas. The area west of the MRA, where the TSFs are located, is mapped as moderate potential arable land, however it is noted that the proposed TSF is on land previously also hosting a TSF and the arable potential has thus been greatly affected by past land uses.

The pre-mining land use in the area was probably associated with low quality grazing (Van Der Merwe, August 2010). Mining activities commenced in the late 1880's. visual observations suggest that historically, commercial forestry was also practiced within parts of the current MRA.

The entire MRA overlaps with the proclaimed Barberton Nature Reserve. Surface land uses associated with the Fairview Mine's main infrastructure area on the western side of the BNR and MRA have been excluded from the fence-line of the BNR. The BNR Management plan indicates that the fence in this portion of the reserve follows the Eskom Servitude located there. The operational No 11 Adit is located within the Nature Reserve, as are remnants of mining activities that have been taking place in the mountains for the past 100 years. Illegal mining activity is also extremely common in these mountains.

Neighbouring land uses includes mining, conservation and informal settlements. A preliminary land use map is shown in Figure 23.



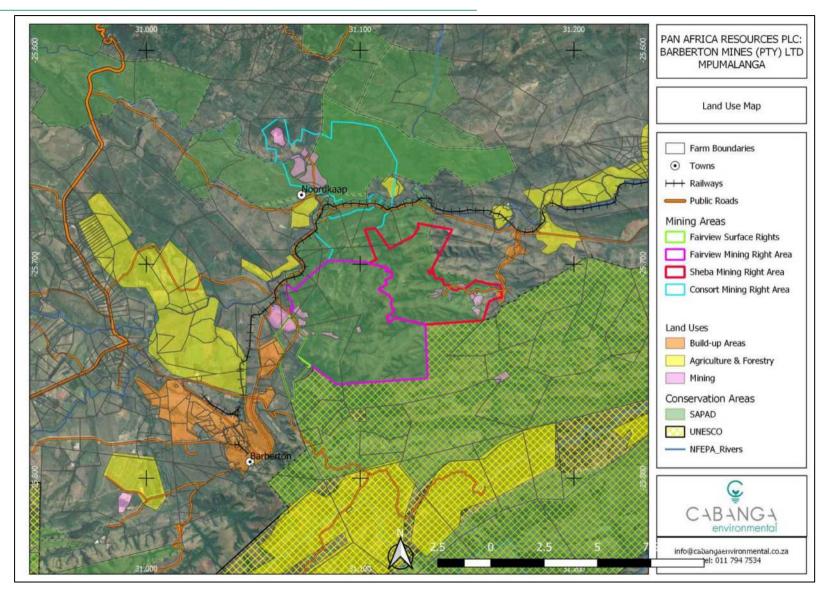


Figure 23: Land Use Map



# 7.1.4 Hydrogeology (Groundwater)

Based on available data the depth of the water table at Fairview Mine is typically between five and thirty metres. Numerous boreholes are drilled in and around the Fairview MRA including monitoring boreholes, scavenger boreholes and boreholes for potable water supply (Van Der Merwe, August 2010).

The minimum water level recorded for the March 2018 monitoring run is 6.49 metres below ground level (mbgl) with the maximum measured as 21.95 mbgl. Available data shows correlation between groundwater levels and topographic elevation and it can thus be assumed that deeper underground mining operations do not affect the shallow aquifer by dewatering (Mostert, August 2018).

The groundwater flow direction in the vicinity of the project area is in a general north-western direction towards the lower lying drainage system of the Suidkaap River (Mostert, August 2018).

Key constituents at high concentrations that are present in gold tailings and operational areas of the mine include nitrates, sulphate, arsenic and cyanide. Due to the stable character of sulphate (SO<sub>4</sub>), this parameter is a good indicator for detecting the contamination impacts of mining activities i.e. pollution plume emanating from TSFs. Time series data from existing monitoring boreholes were evaluated to determine the current extent of the pollution plume (Mostert, August 2018). Please refer to Figure 24.

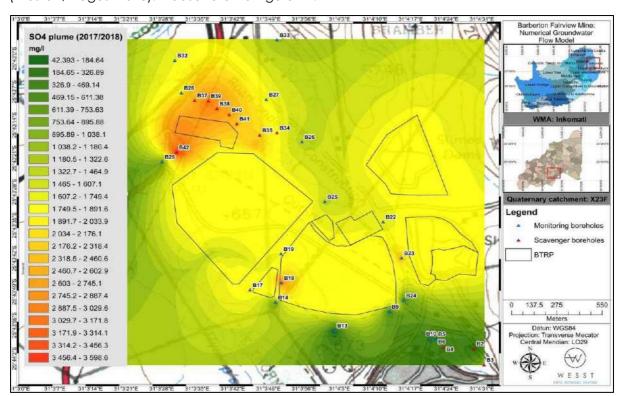


Figure 24: Extent of the existing SO4 pollution plume (average values for monitoring period 2017).

Many water users in the area rely on boreholes for water supply (irrigation and domestic water, including potable water requirements).



Metago Water Geosciences (Pty) Ltd were appointed by Barberton Mines to carry out geochemical test work related to mine operations in Barberton in 2011. The assessment included analysis of 1 waste rock sample and 1 tailings sample from Fairview Mine.

All tested waste rock and tailings samples showed a positive net neutralising potential (NNP) indicating the potential to neutralise any generated acidity. The Fairview tailings sample achieved neutralisation potential ratio above 4 (at 17), rendering the material non-acid-generating (Bolton, 2011).

Representative samples from the tailings generated at the Fairview Plant, which would be deposited on the proposed new TSF, have been submitted to an accredited laboratory for geochemical characterisation and classification. These tests have not yet been concluded.

The Water Research Commission (WRC) reports that groundwater utilisation in the Inkomati-Usuthu Water Management Area (WMA) where the site is located is relatively small, due to the "well-watered nature of most of the area". The Barberton Greenstone belt has a generally high mineralogical risk rating due to Acid Rock Drainage (ARD) and potentially toxic trace elements of antimony, lead and nickel (Water Research Commission (WRC)).

The WMA contains two major aquifer systems: Integranular and fractured aquifers with borehole yields between 0.5 and 2.0l/s, and fresh water (<70mS/m) karst aquifer systems with borehole yields of more that 5.0l/s.

# 7.1.5 Hydrology (Surface water)

The majority of the Fairview MRA and the entirety of the Fairview Surface areas fall within quaternary catchment X23F, which forms part of the Inkomati-Usuthu Water Management Area (WMA). The Inkomati-Usuthu WMA is situated in the north-eastern part of South Africa and borders on Mozambique and Swaziland. All rivers from this area flow through Mozambique to the Indian Ocean (Water Research Commission (WRC)).

The MRA is drained by the Suidkaap River, via the Olifantskloof Creek, Laubscher's Creek and Hyslops Creek that traverse the Mine Area.

Water quality monitoring results indicate that water in the Olifantskloof Creek upstream of the TSF and downstream of the mine contains elevated total dissolved solids (TDS), sulphates and magnesium. TDS, total hardness, calcium, magnesium, sodium, chloride, sulphate and manganese are elevated in the Laubscher Creek, which is a cause for concern and should be investigated. Water quality in the Hyslops Creek upstream of the Olifantskloof Creek confluence was determined to be good, downstream of the confluence with the Olifantskloof Creek, water quality in the Hyslops Creek deteriorated (Van Der Merwe, August 2010)

Surface water users downstream of Fairview include livestock watering and irrigation agriculture.



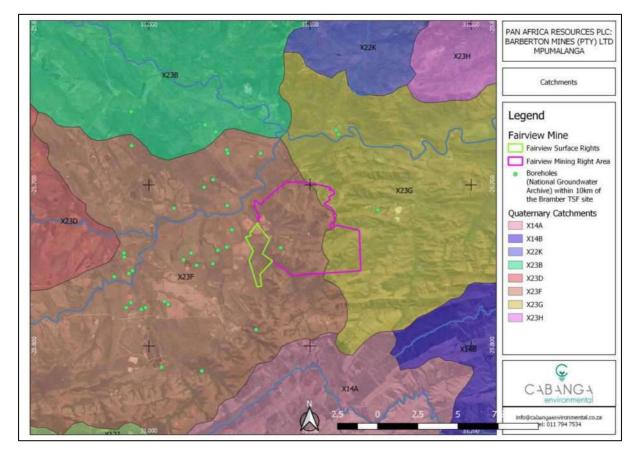


Figure 25: Quaternary Catchments

#### 7.1.6 Wetlands

Wetlands are defined in the NWA (Act 36 of 1998) as "land which is transitional between terrestrial and aquatic systems where the water table is usually at or new the surface, or the land is periodically covered with shallow water, and which land in normal circumstances supports or would support vegetation typically adapted to life in saturated soil".

"Watercourse" is defined in the Act as any river or spring, any natural channel in which water flows regularly or intermittently, a wetland, lake or dam into which or from which water flows and any other collection of water declared by the Minister to be a watercourse.

The National Freshwater Ecosystems Priority Areas (NFEPA) Project was a collaboration between the CSIR, SANBI, the WRC, DWS and DEA and many other role-players and attempted to map the freshwater ecosystem priority areas, including rivers and wetlands, throughout South Africa.

The NFEPA Project identified two natural, unchanneled valley bottom wetlands on the site of the Bramber TSF. It cannot be said that any wetlands exist within this footprint. A freshwater ecology study will be undertaken as part of the EIA.

None of the creeks traversing the MRA or surface rights areas are regarded as NFEPA Rivers or wetlands, however the Suidkaap River is identified in the NFEPA data and designated Class C: Moderately modified.



Figure 26 shows the NFEPA rivers and wetlands, along with the Mpumalanga Biodiversity Sector Plan (MBSP) Freshwater Assessment, in relation to the project area.

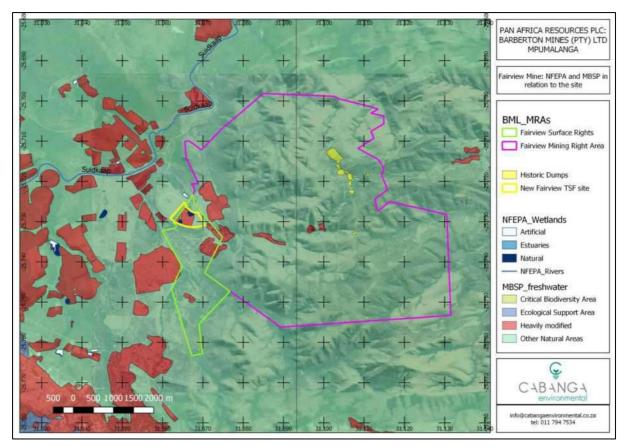


Figure 26: NFEPA and MBSP in relation to the site

# 7.1.7 Air Quality

Mining is the primary activity in the area contributing to dust and gaseous emissions from crushing and mineral processing as well as vehicle movement. Vehicle movement on unpaved roads in the vicinity likely contributes significantly to dust fallout levels in the area.

Residential areas in the vicinity will be considered sensitive receptors. In addition to residential receptors, conservation land uses in the area are also regarded as sensitive to deterioration in air quality.

Dust fallout monitoring is undertaken monthly at thirteen monitoring points in the vicinity of Fairview Mine surface activities, illustrated in Figure 27. The monitoring points are concentrated around the current No 11 Adit and Plant, Main Infrastructure Area and TSFs and the Fairview Mine Village which is the only residential point being monitored as it is the closest to the emission sources associated with the Mine.

Single exceedances of the residential dust fallout limit of 600mg/m²/day have been recorded. Exceedances are permissible so long as there are no more than two per year and not in sequential months. No exceedances of the industrial limit of 1200m g/m²/day has been recorded for 2019.



Existing dust monitoring data therefore indicates that the current mining activities do not lead to excessive dust generation.

An air quality impact assessment (AQIA) has been commissioned as part of the EIA Process. The AQIA will determine the likely dust fallout and emissions arising from the proposed Project, to determine whether the Project would comply to the air quality standards and recommend management actions to be implemented at the Project to ensure compliance and the prevention of potential pollution.

Table 9: Dust fallout monitoring network

| Locality No | Classification | Co-ordinates   |               |
|-------------|----------------|----------------|---------------|
| FAAS1       | Industrial     | 25°43'56.64"S  | 31° 6'3.12"E  |
| FAAS 2      | Industrial     | 25°43'54.24"S  | 31° 5'59.82"E |
| FAAS 3      | Industrial     | 25°43'57.54"S  | 31° 5'57.90"E |
| FAAS 4      | Industrial     | 25°43'51.00''S | 31° 5'57.90"E |
| FAAS 6      | Industrial     | 25°43'55.62''S | 31° 4'30.18"E |
| FAAS 7      | Industrial     | 25°43'58.62''S | 31° 4'36.60"E |
| FAAS 8      | Residential    | 25°44'5.94"S   | 31° 4'19.20"E |
| FAAS 9      | Industrial     | 25°43'53.28''S | 31° 4'10.98"E |
| FAAS 9B     | Industrial     | 25°43'53.04"S  | 31° 3'56.64"E |
| FAAS 12     | Industrial     | 25°43'43.60''S | 31° 4'13.63"E |
| FAAS 13     | Industrial     | 25°43'45.48''S | 31° 4'38.94"E |
| FAAS 14     | Industrial     | 25°43'10.62"S  | 31° 3'50.28"E |
| FAAS 15     | Industrial     | 25°43'17.88"S  | 31° 3'28.98"E |



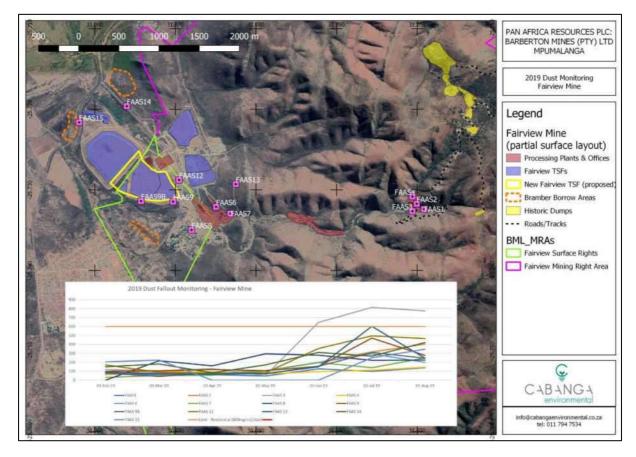


Figure 27: Dust Monitoring Points and Results of 2019 Dust Fallout Monitoring to date

# 7.2 Biological Environment

Mucina & Rutherford (2006) identifies three distinct vegetation types potentially affected by the proposed project aspects:

- The historic dumps are located in Barberton Montane Grassland (Gm17);
- The proposed new TSF is located on Legogote Sour Bushveld (SVI9) and Kaalrug Mountain Bushveld (SVI12).

The vegetation types also marks the transition between the Savanna Biome (containing the Kaalrug Mountain Bushveld and Legogote Sour Bushveld) and the Grassland Biome (Barberton Montane Grassland) (Figure 28).

The **Legogote Sour Bushveld** is characterized by dense woodland including medium to large shrubs often dominated by *Parinari curatellifolia* and *Bauhinia galpinii* with *Hyperthelia dissolute* and *Panicum maximum* in the undergrowth. Less rocky sites often host short thicket dominated by *Acacia ataxacantha*. The succulent herb *Aloe simii* is endemic to this region. *Englerophytum magalismontanum*, *Aloe petricola* and *Myrothamnus flabellifolia* are typically found on exposed granite outcrops with low vegetation cover. Scattered alien plants include *Lantana camara*, *Psidium guajava* and *Solanum mauritianum*. Legogote Sour Bushveld is regarded as Endangered, with a conservation target of 19% and only 2% statutorily conserved.



The vegetation unit has been greatly transformed (50%) by plantations, cultivation and urban development (Mucina & Rutherford, 2006).

**Kaalrug Mountain Bushveld** occurs in the Mpumalanga and extends slightly into Swaziland. This vegetation type comprises open to dense, short mountain savanna or thickets with a denser grassy layer at higher altitudes. The vegetation type is regarded as Least Threatened, with a 24% conservation target and some 16% conserved in the Mountainlands Nature Reserve (now part of Barberton Nature Reserve) and another 9% conserved in Cwantalala and Boondocks Private Reserves. Approximately 12% of the vegetation unit has been transformed, mainly by cultivation and plantations. Erosion is generally low. The Succulent Shrub: *Euphorbia complexa* and *Geophytic Herb: Ledebouria cremnophila* are endemic to this vegetation unit. (Mucina & Rutherford, 2006)

Barberton Montane Grassland extends from Barberton westwards towards Nelshoogte, Northwards towards Kaapmuiden and south-west towards Piggs Peak at altitudes ranging from 760m to 1640m. The vegetation unit is associated primarily with the high mountains above Barberton. Dominant vegetation is short, rocky grassland that gradually transitions to woodland along the lower slopes. The vegetation unit contains numerous biogeographically important taxa and endemic species including (but not limited to) Encephalartos heenanii; Protea caffra subsp. Falcata; P. roupelliae subsp. Hamiltoni; Tinnea barbata; Euryops discoideus; Helichrysum calocephalum; Hemizygia stalmansii; Holothrix culveri; Streptocarpus pogonites; Thorncroftia thorncroftii; Disa intermedia and Aloe albida. The conservation status of the unit is Vulnerable, with 26% of the vegetation unit being protected in nature reserves and a conservation target of 27 %. Almost 40% of the unit has been transformed by plantations (Mucina & Rutherford, 2006).

The vegetation at Fairview has been greatly disturbed due to current and past mining activities and associated infrastructure such as tailings dams, processing plants and housing developments. Both indigenous and alien pioneer species have re-colonised some of the disturbed areas, while tracts of natural vegetation are still found on the hills, where little transformation has taken place (Van Der Merwe, August 2010).

Due to the extremely varied topography in the MRA expected habitats vary from riverine bush to sour bushveld to mountain sourveld. The Mine is located in the Barberton Centre of Plant Endemism and it is expected that protected species and species of conservation concern (SCC) exist in the area.

The area contains distinctive soils due to the unique geology of the Barberton Greenstone Belt, which host a variety of plant species including the endemic *Encephalartos heenanii* (Woolly Cycad) which is listed as Critically Endangered in the IUCN Red List (World Heritage Committee, 2018).

Exotic and invader species are abundant in the vicinity of the existing surface disturbances associated with the current and historic mining activities throughout the MRA and surface rights areas.

Invader species identified include Syringa (Melia azadarach), Jacaranda, Lantana (Lantana camara), Paraffin Weed (Chromolaena oderata) and Sesbania (Sesbania punicia).



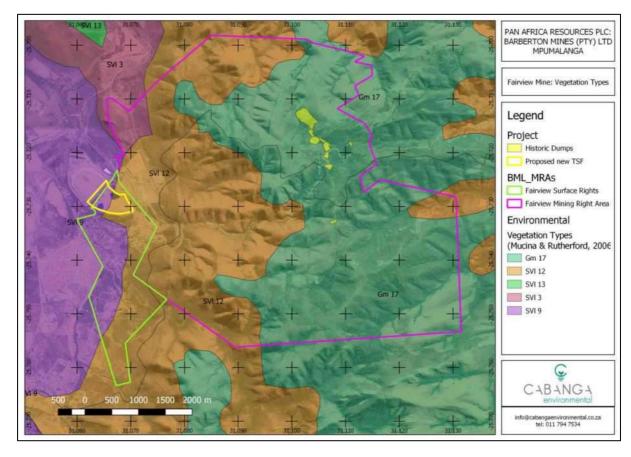


Figure 28: Vegetation Types (Mucina & Rutherford, 2006)

The total mammal list of the BNR phase 3 comprises 16 species. In additional to naturally occurring game there have been a number of introductions including Blue Wildebeest, Impala, Eland, Red Hartebeest, Waterbuck, Warthog, Kudu and Zebra. Five White Rhino have been donated to the reserve from Kruger National Park, however these animals have not yet been introduced due to concerns over security and population size/viability (MTPA, 2012). Mammals occurring in the BNR are listed in Table 10. In addition, carnivores such as leopard, brown hyena, caracal, civet, genet, serval and jackal occur in the area. A study of bat fauna was conducted in 2004. The historic mine adits provide good habitat for a number of bat species (MTPA, 2012).

Over 300 bird species have been recorded in the BNR, primarily by the Barberton Bird Club. The South African Bird Atlas Project (SABAP) recorded a total of 246 bird species in the area.

No detailed reptile or amphibian surveys have been undertaken on the area. The Lepidopterists Society has conducted numerous visits to Mountainlands Nature Reserve (now phase 3 of the BNR) and has compiled a list of species from observation. This includes the endemic species Aloeides barbarae and other Red Data species including Lepidochrysops jefferyi and L. swanepoeli (MTPA, 2012).



Table 10: Mammals of the BNR Phase 3 (MTPA, 2012)

| Туре         | Common Name  | Туре             | Common Name       |  |  |  |
|--------------|--------------|------------------|-------------------|--|--|--|
| Bulk Feeders | Zebra        | Selective: Tall  | Red Hartebeest    |  |  |  |
|              | Bushpig      | Grass Feeders    | Mountain Reedbuck |  |  |  |
|              | Waterbuck    |                  | Common Reedbuck   |  |  |  |
|              | Cattle       | Selective: Short | Black Wildebeest  |  |  |  |
| Browsers     | Grey Duiker  | Grass            | Blue Wildebeest   |  |  |  |
|              | Red Duiker   |                  | Impala            |  |  |  |
|              | Kudu         |                  | Eland             |  |  |  |
|              | Klipspringer |                  | Warthog           |  |  |  |
|              | Bushbuck     |                  | Goats             |  |  |  |

A Terrestrial Biodiversity specialist assessment has been commissioned as part of the EIA Process, which will delineate specific habitats associated with the Project Area and its immediate surroundings. The study will further identify specific species found on the project site, with emphasis on identifying those species that may be of conservation concern or protected species, as well as alien or invasive species which require specific management.

An aquatic ecological assessment has also been commissioned.

Scientific Aquatic Services (SAS) undertook an aquatic and toxicological assessment of the Suidkaap River in the vicinity of Fairview (as part of an ongoing monitoring programme) in June 2019. The monitoring event included four strategic points namely:

- SK1: located on the Suidkaap River in a fairly remote area upstream of the activities associated with the Fairview Mine;
- SK2: located on the Suidkaap River at a bridge crossing, downstream of the Fairview Mine activities:
- Hyslops: seasonal stream that receives discharge from the Fairview Mine, which joins
  the Suidkaap River between SK1 and SK2 (Note: Hyslops Creek was dry at the time of
  the June 2019 assessment) and
- FWSP10: located in the Laubscher's Creek, downstream of the TSFs at Fairview. The Creek joins the Suidkaap River between SK1 and SK2.

This latest assessment concludes that it is possible Fairview Mine is having a limited impact on the water quality in the Suidkaap River. Water quality in the Laubscher's Creek shows elevated Electrical Conductivity, possibly as a result of the hydraulic reclamation activities that are taking place just upstream of the Creek. The assessment showed decreases in a downstream direction of the macro-invertebrate community diversity and integrity, habitat integrity and SASS5 Classification.



### 7.3 Socio-Cultural Environment

The Project Site is located in the Fairview MRA which lies within the Mbombela Local Municipality of the Ehlanzeni District Municipality in the Mpumalanga Province of South Africa. This section of the report describes the historic and current social and economic environment in the immediate vicinity and the wider region that could be affected by the Fairview Mine and proposed Projects.

The site falls within the former Umjindi Local Municipality (ULM), which was disestablished and merged with the Mbombela Local Municipality (MLM) on 3 August 2016. Barberton was the seat of the ULM and historic data and information relevant to the Municipality is still relevant to some extent in describing the local socio-economic environment, as the statistics related to ULM will be more focussed on the relevant area than information related to the existing MLM which covers a much larger area.

# 7.3.1 Demographics

Census 2011 recorded 67,156 people in the ULM, which increased from the 2001 Census which recorded the total population at 53,744. The majority of the population (87%) are black African, 9.8% are white, with other groups making up the remaining 3.2%. 52.3% of the population are male, and 47.7% are female. Of those aged over 20 years, 10.4% have no form of schooling, 4.5% have completed primary school, 32.2% have some secondary education, 30.7% have completed matric and 9.2% have some form of higher education. SiSwati is by far the dominant language (72.7%), with Afrikaans, English, IsiZulu, Sepedi, Sesotho and Xitsonga comprising the other languages spoken (http://www.statssa.gov.za).

Of the total population, 28,575 persons (42.5%) are economically active (employed or unemployed but looking for work). Of these 27.3% (7,681) are unemployed. 36.5% of the 14,917 economically active youth (aged between 15 to 34 years) are unemployed.

Census 2011 recorded the majority of the ULM population to live in urban areas (72.2%) (with 17% living on farms and 10.4% living in tribal / traditional areas. 89.2% of the ULM population had access to cell phones with only 7% having access to Landline telephones. Roughly 68.5% of the population has access to television and radio (only 25% has access to satellite television and only 17% have access to computers). 23% of the ULM population has access to a motor car indicating some dependence on public transport (http://www.statssa.gov.za).

The majority of households reportedly receive water from a water scheme, have flush toilets connected to a sewer system and have refuse removal from the local authority (http://www.statssa.gov.za).

# 7.3.2 Economic activities and sources of employment

Mining in the Barberton area dates back to 1874 when the first gold was discovered locally. The town of Barberton largely owes its existence to mining. The major sources of employment in the area currently are mining, forestry and agriculture (Van Der Merwe, August 2010).

Main Economic Sectors of the ULM comprised of Community services (22.9%), manufacturing (17.8%), trade (16.3%), finance (14.1%), transport (13.5%), and agriculture (9.3%) (https://municipalities.co.za/overview/1146/umjindi-local-municipality). The ULM Draft IDP 2015-16 indicates that agriculture was the dominant economic sector in the ULM (based on



the % contribution to the Ehlanzeni District Municipality's GVA, namely 13.1%). This was followed by Manufacturing (8%), Transport (6.2%) and Utilities (5.7%). Mining only contributed 3.2%. ULM was the lowest contributor to the District's GVA in 2012 implying that ULM was by far the smallest economy in the District (ULM, 2015).

In 2001 mining contributed 13.41% to the over-all ULM economy but by 2012 this number reduced to just 2.2%. Agriculture remained relatively constant from 8.51% in 2001 to 9.39% in 2012. Manufacturing was the biggest contributor in 2001 (20.52%) but by 2012 Community Services was the biggest economic contributor by sector (22.98%), with manufacturing still contributing significantly with 17.88%. Community Services grew to 22.98% from the 2001 contribution of 18.62% (ULM, 2015).

Agriculture is by far the most important employer in the ULM, providing 40% of jobs in the ULM in 2001 (and 33% in 2012) as compared to mining contributing 2.8% in 2001 increasing slightly to 3% in 2012. Jobs in the community services sector increased significantly from 8.8% in 2001 to 14% in 2012.

#### 7.3.3 Sites of archaeological and cultural interest

"Heritage resource" as defined in the NHRA means any place or object of cultural significance. "Cultural significance" means aesthetic, architectural, historical, scientific, social, spiritual, linguistic or technological value or significance.

The Barberton area has been extensively mined since the 1870's when the first gold was discovered in the area and as such the Barberton Mines property contains several sites that may be of cultural significance, including cemeteries, Eureka City and the sites of the old workings on the mountains within the MRAs. The Fairview, Sheba and New Consort Mine's may also be considered heritage structures due to their operating age. The Sheba Mine has the oldest working adit in South Africa.

It should be noted that given the age of the mine, the mine infrastructure and adits may be considered to be of heritage value as much of the infrastructure dates back more than 60 years (Van Der Merwe, August 2010).

The entire Barberton Region is of cultural heritage significance, due not only to the history of mining in the area, but also due to the geology associated with the region.

Heritage resources of South Africa which are of cultural significance or other special value for the present community and for future generations are considered part of the national estate. Such resources include geological sites of scientific or cultural importance.

The dumps that are being targeted for reclamation are older than 60 years. The NHRA prohibits any person from demolishing any structure or part thereof which is older than 60 years without a permit issued by the relevant heritage resources authority. The NHRA defines "structure" as "any building, works, device or other facility made by people and which is fixed to land, and includes any fixtures, fittings and equipment associated therewith". An archaeological impact assessment has been commissioned as part of the EIA to verify the historical significance of these dumps and identify any other heritage resources that may be affected by the proposed projects.



Just south of the Fairview MRA lies the Barberton Makhonjwa Mountains World Heritage Site (BMM WHS). The site was inscribed to the World Heritage List in 2018, due to the significance of the geological structures associated with the Barberton Greenstone Belt.

The Department of Environmental Affairs reports that the BMM represents the best-preserved, oldest and most diverse succession of volcanic and sedimentary rock dating back 3.6 to 3.25 billion years, when the first continents were starting to form. It features meteor-impact fallback breccias resulting from the impact of meteorites formed just after the Great Bombardment (4.6 to 3.8 billion years ago), which are particularly well preserved (DEA, January 2017).

The ancient geology associated with the BMM is core to the Outstanding Universal Value (OUV) of the property included as a WHS. Over the past 50 years, geological fieldwork in the Barberton Greenstone Belt has identified hundreds of geosites that collectively define the key features of the processes and products in the very early stages of the earth's development.

#### 7.3.4 Noise

The main source of noise in the area emanates from the operation of the existing processing plant at Barberton Mines and compressors used for underground mining. The closest receptors that can be impacted by increases in environmental noise are the town of Barberton, neighbouring houses, informal settlements located near the mine and people living in the Fairview Mine residential areas (Van Der Merwe, August 2010).

There are no specific activities associated with the BNR (other than conservation) in the immediate vicinity of the site and it is considered unlikely that the existing or proposed activities at Fairview will generate enough noise to be disturbing to visitors to the BNR. Potential impacts of increased environmental noise on game in the reserve is not known but it is anticipated that sensitive species would migrate further to the south of the reserve if they are impacted at all, and may return to the MRA once the reclamation activities have been completed and the areas rehabilitated.

# 7.3.5 Visual Aspects and Light

The existing TSFs located at Fairview are probably the most visually conspicuous elements associated with Fairview. These have an average height of about 30m. The mine site is however not visible from major tourist routes although it is visible from the ruined Eureka City which is infrequently visited by tourists (Van Der Merwe, August 2010).

# 8 Impact Assessment and Management

On 09 February 2018 the Department of Environmental Affairs (DEA) published Draft National Guidelines on minimum information requirements for preparing EIAs for Mining Activities that require environmental authorisation. Requirements for the assessment of impacts are stipulated in Section 4 of the Guideline.

The Impact Assessment Methodology proposed below (Section 8.1) was developed with due cognisance of the guideline.



The purpose of the impact assessment is to determine the Significance of potential impacts, so that those activities that are expected to result in high impacts can be altered, or management measures imposed to lessen the impact significance.

A detailed impact assessment will be undertaken as part of the EIA Phase. This section of the report serves to identify preliminary anticipated impacts and their anticipated significance.

# 8.1 Impact Assessment Methodology

Impact Significance is calculated by the following formula:

# Impact Significance = Consequence x Likelihood

**Likelihood** refers to the probability that an impact will occur at some time throughout the project.

The Matrix which is proposed to determine Likelihood is as follows:

# Table 11: Matrix used to determine likelihood

|           | Unlikely: Impact Could occur in extreme events. Less than 15% chance of the impact  | 1 |
|-----------|---|---|
|           | ever occurring.   |   |
| 9         | Possible: possibility of impact occurring is very low. 16% - 30% chance of the impact   | 2 |
| ≟         | occurring.  |   |
| <u>\$</u> | Probable There is a distinct possibility of the impact occurring. 31% to 60% chance.  | 3 |
| =         | Probable There is a distinct possibility of the impact occurring. 31% to 60% chance. Highly Probable: The impact is expected to occur. Between 61% and 85 % chance. | 4 |
|           | Definite: There are sound scientific reasons to expect that the impact will occur   | 5 |

**Consequence** is calculated by considering the **duration**, spatial **scale** and **intensity** of an impact.

**Duration** relates to the time-frame that an aspect will be impacted upon. For example, any impact to a heritage resource is considered permanent, while the impact of increased traffic related to a construction activity will only last as long as the construction phase. Duration is rated according to the following criteria:

Table 12: Matrix used to rate duration

|   |          | Short term: Less than 1 year and is reversible. | 1 |
|---|----------|---|---|
|   | 0        | Short to medium term: 2 - 3 years               | 2 |
| - | <u></u>  | Medium term - 3 to 10 years                     | 3 |
|   | <u> </u> | Long term: 11-20 years                          | 4 |
|   | _        | Permanent: in excess of 20 years                | 5 |

Spatial **Scale** relates to the physical extent of the zone of influence of an impact. Where groundwater or air quality impacts, for example, can extend far beyond the footprint of the



activity, it is not expected that the impact of vegetation removal should extend beyond the footprint of the activity of vegetation removal.

Scale is rated according to the following criteria:

Table 13: Matrix used to rate scale

|          | Isolated: Limited footprint within the site will be affected (less than 50% of the |   |
|----------|--|---|
| ent      | site)  | 1 |
| X        | Site Specific: The Entire Site will be affected                                    | 2 |
| <b>1</b> | Local: Will affect the site and surrounding areas                                  | 3 |
| <u>e</u> | Regional: Will affect the entire region / catchment / province                     | 4 |
| Scal     | National: Will affect the country, and possibly beyond the borders of the          |   |
|          | country  | 5 |

The Intensity of an impact is calculated by considering the severity of the impact (how it will change the aspect, will it be destroyed completely, or altered slightly?) and the sensitivity of the aspect (is the aspect sensitive to change, and is the aspect important to ecosystem processes or social dynamics?). For example, if the impact is anticipated to completely destroy a local plant population, but the plant population is commonly found and protected in nearby surroundings, the over-all intensity is lowered. If, however, the plant population in question is unique or protected, the intensity increases proportionately.

The Matrix which is proposed to determine Intensity is as follows:

Table 14: Matrix used to rate Intensity

|    |                                 |  | Slight: Little effect, negligible disturbance / benefit   | 1  |
|----|---------------------------------|--|---|--|
|    | Not                             |  | Slight to Moderate: Effects are observable but natural process  | 2  |
| 2  | significant                     | 4  | continue  |  |
|    |                                 | βpr  | Moderate: ecosystem processes / social dynamics are permanently                                       | / 3  |
| 3  | Slight                          | nit  | altered, but functioning.   |  |
| 4  | Slight -                        |  |   | 4  |
|    | Moderate                        | 1  | Where fortellottis liftlifed  |  |
|    |                                 |  | High: The aspect is affected so that its functioning is compromised                                   | 5  |
| 5  | Moderate                        |  | and this effect is irreversible   |  |
|    | Moderate -                      |  | Not sensitive: The aspect is not sensitive to change (No  | 1  |
| 6  | High                            |  | irreplaceable loss of resource)   |  |
|    |                                 |  | Somewhat sensitive: The affected aspect is of not of significant                                      | 2  |
| 7  | High                            |  | value but is sensitive to change  |  |
|    |                                 | #iv  | Sensitive: The affected aspect is of moderate value and is slightly                                   | 3  |
| 8  | Very High                       | ns   |   |  |
|    | Extremely                       | Se   | Very Sensitive: The affected aspect is of significant value and only                                  | 4  |
| 9  | High                            |  | slightly resilient to change  |  |
|    |                                 |  | Irreplaceable: The affected aspect is valued and sensitive to   | 5  |
| 10 | Fatal Flaw                      |  | change. Irreplaceable loss of significant resource  |  |
|    | 3<br>4<br>5<br>6<br>7<br>8<br>9 | 2 significant 3 Slight 4 Slight Moderate 5 Moderate Moderate - 6 High 7 High 8 Very High | Not 2 significant  3 Slight 4 Slight Moderate  5 Moderate Moderate High  7 High Extremely High 9 High | <ul> <li>2 significant</li> <li>3 Slight</li> <li>4 Slight Moderate</li> <li>5 Moderate</li> <li>6 High</li> <li>7 High</li> <li>8 Very High</li> <li>Extremely 9 High</li> <li>Continue</li> <li>Moderate: ecosystem processes / social dynamics are permanently altered, but functioning.</li> <li>Moderate: ecosystem processes / social dynamics are permanently altered, but functioning.</li> <li>Moderate: ecosystem processes / social dynamics are permanently altered, but functioning.</li> <li>Moderate: ecosystem processes / social dynamics are permanently altered, but functioning.</li> <li>Moderate: ecosystem processes / social dynamics are permanently altered, but functioning.</li> <li>Moderate: ecosystem processes / social dynamics are permanently altered, but functioning.</li> <li>Moderate: ecosystem processes / social dynamics are permanently altered, but functioning.</li> <li>Moderate: ecosystem processes / social dynamics are permanently altered, but functioning.</li> <li>Moderate: ecosystem processes / social dynamics are permanently altered, but functioning.</li> <li>Moderate: ecosystem processes / social dynamics are permanently altered, but functioning.</li> <li>Moderate: ecosystem processes / social dynamics are permanently altered, but functioning.</li> <li>Moderate: ecosystem processes / social dynamics are permanently altered, but functioning.</li> <li>Moderate: ecosystem processes are altered to the point where function is limited</li> <li>High: The aspect is affected so that its functioning is compromised and this effect is irreversible</li> <li>Not sensitive: The aspect is not sensitive to change (No irreplaceable loss of resource)</li> <li>Somewhat is sensitive to change is sensitive to ch</li></ul> |

Therefore, considering the formula:

Significance = Consequence x Likelihood

Where Consequence = Duration + Scale + Intensity



# And Intensity = Severity of the Impact + Sensitivity of the Aspect

The over-all Significance rating can be calculated as a value between 4 and 100. The score is then categorised as follows:

- 4 to 19 = Insignificant Impact, no mitigation is required beyond standard best practice;
- From 20 to 39 = <u>Low</u> Impact, specific mitigation should be included in the EMP and monitoring should be undertaken;
- From 40 to 59 = Moderate Impact, specific mitigation with strict monitoring is required;
- From 60 to 79 = <u>High Impact</u>, mitigation should consider alteration of the design or process to reduce the impact significance;
- >Higher than 80 (100 max) = The Impact is so <u>Significant</u> that the project design must be reconsidered to avoid the impact.

Impacts will be rated as per the abovementioned methodology without consideration of mitigation measures first, however there may be some mitigation already inherent in the design of the Project (i.e. by using existing TSF footprint as the site for the proposed new TSF instead of disturbing new areas, incorporating existing roads into the project design and re-use of dirty water in the existing processing activities).

Those impacts that are rated as having a moderate impact or above will be investigated further and management measures identified to attempt to reduce the Consequence or Likelihood of the impact. These impacts will then be rated again, while considering the mitigation measures that have been imposed.

# 8.2 Preliminary Impact Identification, assessment and Mitigation

Each of the activities associated with the proposed project aspects may be associated with various impacts to environmental aspects. These impacts are generally regarded as cumulative in light of the historic mining at the Fairview Mine and in the wider region.

Table 15 summarises the ways in which the proposed Project could impact on various environmental aspects. Each impact was then rated on a preliminary basis according to the criteria discussed in Section 8.1.

Please see Appendix C for the complete preliminary impact assessment tables.



Table 15: Activities and Impact Identification, preliminary significance and management

| Activity  | Aspect                      | Impact /<br>Risks                | Significance   | (wit | nificance<br>thout<br>igation) | Mitigation   |    | Significance<br>(with Mitigation) |  |
|---|-----------------------------|----------------------------------|--|------|--------------------------------|--|----|-----------------------------------|--|
| Removal of<br>vegetation<br>from new TSF<br>footprint | Terrestrial<br>Biodiversity | Direct loss of species & habitat | Vegetation clearance will definitely take place. Given the site location at the old Bramber TSF footprint, vegetation is not regarded as sensitive. The impact will be of high severity as vegetation will be destroyed entirely on footprint areas. The duration will be permanent, given the TSF will remain after closure. The Impact will be isolated to the footprint area. Over-all, impact significance is regarded as Moderate. Impact duration can be reduced by rehabilitation (reinstating vegetation on the TSF) but this does | 55   | Moderate                       | Demarcate footprint area clearly and prevent vegetation clearance outside of the area absolutely required for construction of the proposed new TSF. Verify the presence / absence of protected or sensitive species prior to initiating vegetation clearance, and ensure the necessarily permits are obtained if required prior to disturbing such species. Ensure concurrent rehabilitation of the TSF side slopes as it is developed, and the implementation of final rehabilitation measures after Life of the facility is reached. | 50 | Moderate                          |  |



| Activity  | Aspect                      | Impact /<br>Risks   | Significance   | Significance<br>(without<br>Mitigation) |          | Mitigation   |    | Significance<br>(with Mitigation) |  |
|---|-----------------------------|---|--|---|----------|--|----|-----------------------------------|--|
|   |                             |   | not significantly reduce impact significance.  |   |          |  |    |                                   |  |
| Removal of<br>Vegetation for<br>road upgrades<br>and<br>reclamation of<br>material from<br>historic dumps | Terrestrial<br>Biodiversity | Direct loss of<br>species &<br>habitat                          | In the absence of detailed vegetation studies, vegetation is regarded as very sensitive. Vegetation clearance will definitely take place and impact severity will be high. Mitigation and rehabilitation will be able to reduce the duration and extent of the impact. | 75                                      | High     | Keep affected footprints to the absolute minimum required and demarcate areas clearly to prevent unnecessary clearance of vegetation. Ensure permits for the relocation of protected species (if any) are obtained prior to any clearance taking place. Retain species for use in rehabilitation. Implement concurrent rehabilitation and ensure rehabilitation is successful by monitoring and adjusting rehabilitation measures as required. | 55 | Moderate                          |  |
| Presence of employees on site for construction of TSF, roads and  | Terrestrial<br>Biodiversity | Illegal<br>harvesting of<br>plants and<br>animals<br>(Poaching) | Illegal harvesting is considered highly likely in the absence of mitigation measures. In the absence of detailed studies,  | 56                                      | Moderate | Employee awareness training could reduce the likelihood of illegal harvesting taking place and reduce the impact severity and scale.   | 22 | Low                               |  |



| Activity   | Aspect                      | Impact /<br>Risks  | Significance   | (wit | nificance<br>thout<br>igation) | Mitigation  | _  | Significance<br>(with Mitigation) |  |
|--|-----------------------------|--|--|------|--------------------------------|---|----|-----------------------------------|--|
| reclamation activities.  |                             |  | affected fauna and flora is regarded as highly sensitive and impact severity is rated as High. The risk will cease as activities conclude and employees leave the areas. Without mitigation the impact could extend to the wider areas.                                    |      |                                | Prevent access to adjacent areas and the nature reserve by providing proper oversight and transportation to construction crews.   |    |                                   |  |
| Site disturbance, construction activities (roads, TSF), reclamation activities and material transport. Operation of new TSF. | Terrestrial<br>Biodiversity | Habitat degradation due to dust, emissions, water quality impacts and general disturbance of the sites | Habitats in the mountainous areas are considered sensitive in the absence of detailed ecological studies. Road construction and reclamation activities will most likely result in habitat degradation. Mitigation measures can reduce impact severity, duration and scale. | 56   | Moderate                       | Control dust and emissions arising from activities. Minimize activity footprint. Implement measures to prevent water pollution (sedimentation from erosion and pollution from spillages). Rehabilitate areas once reclamation from a dump is complete (shape and vegetate). | 30 | Low                               |  |



| Activity   | Aspect                      | Impact /<br>Risks                                  | Significance   | (wit | nificance<br>thout<br>igation) | Mitigation  | _  | Significance<br>(with Mitigation) |  |
|--|-----------------------------|--|--|------|--------------------------------|---|----|-----------------------------------|--|
| Disposal of removed alien vegetation leading to establishment of alien species | Terrestrial<br>Biodiversity | Increased proliferation of alien invasive species. | Disposal of vegetative material could possibly result in alien or invasive species spread. The aspect is regarded as very sensitive and the impact will manifest in the long term over the local area without mitigation. Severity is regarded as moderate and overall significance is Low without mitigation can reduce the scale and duration of the potential impact. | 28   | Low                            | Ensure plant material that is removed from site is disposed of legally and so as to prevent the spread of alien species from seeds which may be present in the removed vegetative material. | 24 | Low                               |  |
| General<br>disturbance   | Terrestrial<br>Biodiversity | Increased proliferation of alien invasive species. | Further disturbance of the site is highly likely to result in proliferation of alien and/or invasive species throughout the site, which could spread to a local scale without mitigation.  | 60   | High                           | Compile and Implement alien invasive species identification and management plan throughout the project. Rehabilitate areas and continue to monitor and manage until viable                  | 27 | Low                               |  |



| Activity   | Aspect                      | Impact /<br>Risks    | Significance   | (wit | nificance<br>thout<br>igation) | Mitigation   |    | Significance<br>(with Mitigation) |  |  |
|--|-----------------------------|----------------------|--|------|--------------------------------|--|----|-----------------------------------|--|--|
|  |                             |                      | Such an impact would be of moderate to high severity, on a very sensitive aspect, in the long term. Over-all significance is regarded as high without mitigation. Management measures can potentially reduce the likelihood, extent, duration and magnitude of the impact. |      |                                | ecosystems have reestablished.   |    |                                   |  |  |
| Increased construction and mine vehicles on roads - accidental collisions. | Terrestrial<br>Biodiversity | Fauna<br>mortalities | Fauna mortalities on roads is highly likely to increase due to increased vehicular activity, especially in the mountains. Fauna of the area is regarded as very sensitive in the absence of detailed studies. The impact will be of high severity and                      | 56   | Moderate                       | Strict speed limits and driver awareness training. Vehicles will use only existing and approved routes. No driving on these roads will be allowed at night-time. | 26 | Low                               |  |  |



| Activity  | Aspect                      | Impact /<br>Risks                  | Significance   | (wit | nificance<br>thout<br>igation) | Mitigation   | _  | nificance<br>th Mitigation) |
|---|-----------------------------|------------------------------------|--|------|--------------------------------|--|----|-----------------------------|
|   |                             |                                    | medium term, but will be limited in extent. Impact likelihood can be reduced by mitigation measures.   |      |                                |  |    |                             |
| Lighting at the site attracting insects.        | Terrestrial<br>Biodiversity | Fauna<br>mortalities               | It is highly probable that lighting will attract insects resulting in their death, which is regarded as a high severity impact to a sensitive aspect. Lighting will probably not affect insect populations beyond the site. The impact duration at the new TSF is permanent. Mitigation can reduce the probability and extent of the impact. | 64   | High                           | Use appropriate downlights and only where necessary.                                 | 28 | Low                         |
| Incorrect waste management and bad housekeeping | Terrestrial<br>Biodiversity | Attracting problem animals to site | It is possible that problem animals will be attracted by incorrect waste management.  The impact is of   | 22   | Low                            | Ensure proper housekeeping and adequate waste management in designated facilities to | 20 | Low                         |



| Activity   | Aspect                  | Impact /<br>Risks                            | Significance   | (wit | nificance<br>thout<br>igation) | Mitigation   | _  | iignificance<br>with Mitigation) |  |
|--|-------------------------|--|--|------|--------------------------------|--|----|----------------------------------|--|
|  |                         |  | moderate severity, medium term and may affect the whole site. Over-all significance is considered low, and is further reduced by proper waste management at the site.  |      |                                | ensure separation of waste and that waste is not stored on site for excessive periods of time.           |    |                                  |  |
| Vegetation<br>clearance, soil<br>stripping and<br>construction of<br>new TSF | Aquatic<br>Biodiversity | Deterioration<br>of surface<br>water quality | It is highly probable that construction activities will lead to sedimentation in the absence of mitigation. The receiving water body (Suidkaap River) is regarded as highly sensitive. Impact severity of sedimentation is considered moderate, and short-term given the duration of the construction phase, but impacts could | 52   | Moderate                       | Implement erosion control measures and sediment traps to reduce impact probability, severity and extent. | 22 | Low                              |  |



| Activity                                       | Aspect                  | Impact /<br>Risks                            | Significance   | (wi | nificance<br>thout<br>igation) | Mitigation   | _  | nificance<br>th Mitigation) |
|--|-------------------------|--|--|-----|--------------------------------|--|----|-----------------------------|
|  |                         |  | manifest beyond the local area.  |     |                                |  |    |                             |
| Operation of<br>new TSF                        | Aquatic<br>Biodiversity | Deterioration<br>of surface<br>water quality | Unchecked surface water runoff and potential seepage from the new TSF will probably lead to pollution of very sensitive downstream water resources if not mitigated. The impact will be permanent given the nature of the TSF, of moderate severity and potentially extending beyond the local area. | 48  | Moderate                       | Design and construction of the new TSF will be to the relevant engineering standards to prevent seepage and contaminated runoff from entering downstream water resources. Aquatic Biomonitoring and Water monitoring and reporting as per the IWUL conditions should continue (per updated IWUL for the proposed new TSF). | 28 | Low                         |
| Construction of roads to access historic dumps | Aquatic<br>Biodiversity | Deterioration<br>of surface<br>water quality | The routes to the historic dumps affect several drainages on the mountainsides. The planned road upgrades could cause siltation of receiving waterbodies. In the absence of detailed   | 33  | Low                            | Implement erosion control measures and sediment traps to reduce impact probability, severity and extent.   | 18 | Insignificant               |



| Activity  | Aspect                  | Impact /<br>Risks                            | Significance  | Significance<br>(without<br>Mitigation) |          | (without   |    | Mitigation | _ | nificance<br>th Mitigation) |
|---|-------------------------|--|---|---|----------|--|----|------------|---|-----------------------------|
|   |                         |  | studies, receiving water bodies are deemed very sensitive. The impact will be moderate, given the distance from the roads to nearby streams, and will only manifest during the construction phase, and likely be limited to the site.   |   |          |  |    |            |   |                             |
| Reclamation of<br>historic dumps<br>in/near<br>watercourses | Aquatic<br>Biodiversity | Deterioration<br>of surface<br>water quality | Physical reclamation of material that was dumped within watercourses, will cause sedimentation of the watercourses are flowing. Watercourses are regarded as very sensitive in the absence of detailed studies. Impact severity will be moderate-high but only last for the duration of | 48                                      | Moderate | Implement erosion control measures and sediment traps to reduce impact severity and extent. Once the dumps are reclaimed, it is expected that surface water quality will improve as drainage lines will no longer be affected by the historically dumped material. | 36 | Low        |   |                             |



| Activity  | Aspect                               | Impact /<br>Risks | Significance  | (wi | nificance<br>thout<br>igation) | Mitigation   | _  | nificance<br>th Mitigation) |
|---|--------------------------------------|-------------------|---|-----|--------------------------------|--|----|-----------------------------|
|   |                                      |                   | reclamation activities and be limited to the site.  |     |                                |  |    |                             |
| Stripping of remaining topsoil in preparation for TSF construction (limited to previously vacant area between the Old Bramber TSF and the New Bramber/BTRP TSF) | Soils, land use and capability       | Loss of topsoil   | At least some topsoil (regarded as a sensitive resource) will definitely be lost if the impact is not mitigated. The area is small (6.5 Ha). Mitigation should aim to reduce impact likelihood. | 55  | Moderate                       | Strip topsoil ahead of construction and stockpile separately. Protect stockpiles from erosion, compaction and pollution. Limit stockpile height and slope angle. Vegetate long term stockpiles (material that will not be used in rehabilitation within three months). | 22 | Low                         |
| Stripping of soils<br>for road<br>upgrades and<br>recovery of<br>material from<br>historic dumps  | Soils, land use<br>and<br>capability | Loss of topsoil   | It is considered unlikely that any topsoil remains on the road footprints, or on the historic dumps.  | 24  | Low                            | The specialist soil study will verify the status of soils on the site. It is anticipated that reclamation of the historically dumped material will expose underlying topsoil   | 24 | Low                         |



| Activity   | Aspect                               | Impact /<br>Risks  | Significance   | (wit | nificance<br>thout<br>igation) | Mitigation  | _  | nificance<br>th Mitigation) |
|--|--------------------------------------|--|--|------|--------------------------------|---|----|-----------------------------|
|  |                                      |  |  |      |                                | resources which may recover.  |    |                             |
| Stockpiling of<br>topsoil  | Soils, land use<br>and<br>capability | Loss of topsoil  | Without mitigation, it is highly likely that stockpiles will become polluted or erode. Topsoil is regarded as sensitive. Mitigation should reduce the impact likelihood. | 52   | Moderate                       | Protect stockpiles from erosion, compaction and pollution. Limit stockpile height and slope angle. Vegetate long term stockpiles (material that will not be used in rehabilitation within three months). Prevent vehicle access on stockpiles. Prevent use of chemicals on stockpiles. Prevent alien invasive species from establishing on stockpiles and eradicate / control if these do establish despite prevention methods. | 26 | Low                         |
| Vehicle<br>movement,<br>road<br>construction,<br>establishment<br>of new TSF | Soils, land use<br>and<br>capability | Soil compaction (leading to reduced infiltration, increased runoff etc.) | Soils on roadways and infrastructure areas will definitely be compacted. Soils are regarded as sensitive in the absence of detailed studies. The                         | 70   | High                           | Limit vehicle movement and construction footprints to approved, minimum required area. Rehabilitate roads once no longer required to access historic dumps.   | 50 | Moderate                    |



| Activity  | Aspect   | Impact /<br>Risks  | Significance   | (wil | nificance<br>thout<br>igation) | Mitigation   | _  | ignificance<br>with Mitigation) |  |
|---|----------|--|--|------|--------------------------------|--|----|---------------------------------|--|
|   |          |  | impact severity is moderate – high and may manifest over the whole site in the long term, without mitigation.  Management and rehabilitation can reduce the scale and duration of the impact.  |      |                                |  |    |                                 |  |
| Reclamation of<br>historic dumps<br>from the MRA<br>that overlaps<br>with the Nature<br>Reserve | Land Use | Perceived change in land use from conservation to mining | At a distance, the historic dumps within the nature reserve are not identified by the layman as such. Reclamation activities will most likely look out of place to tourists and conservationists. The issue of conflicting land uses is deemed very sensitive and the severity will be moderate - high. It is anticipated that the impact will be of short | 40   | Moderate                       | Ensure adequate public consultation to manage public perception and expectation (avoid surprise). Ensure the area is adequately rehabilitated and limit affected footprint as far as possible to reduce impact severity. | 32 | Low                             |  |



| Activity   | Aspect      | Impact /<br>Risks             | Significance  | Significance<br>(without<br>Mitigation) |          | Mitigation   | _  | nificance<br>th Mitigation) |
|--|-------------|-------------------------------|---|---|----------|--|----|-----------------------------|
|  |             |                               | duration and isolated due to screening afforded by vegetation and topography.   |   |          |  |    |                             |
| New TSF construction & operation   | Land Use    | Reduced<br>Land<br>Capability | The site was previously used for a TSF and land capability is only reduced in the additional 6.5 Ha affected between the existing BTRP/New Bramber TSF and reclaimed Bramber TSF, which area is not regarded as sensitive.                  | 35                                      | Low      | No mitigation available or required, the affected land (6.5 Ha between the original Bramber and BTRP/New Bramber TSFs) will be the only land affected.   | 35 | Low                         |
| Exposed areas,<br>Vehicle and<br>machinery<br>operation<br>causing dust<br>and fugitive<br>emissions | Air Quality | Deterioration in air quality  | Vehicle and machinery operation, and exposed areas after vegetation clearing, will almost definitely give rise to increased dust and emissions. Air quality is deemed a sensitive aspect. The impact is not expected to be severe given the | 40                                      | Moderate | Limit exposed areas (extent and duration). Ensure vehicles and machinery are in good working order to avoid excessive emission when machines are in disrepair. Expand the mine's dust fallout monitoring programme and ensure compliance to dust | 27 | Low                         |



| Activity                               | Aspect      | Impact /<br>Risks               | Significance   | (wit | nificance<br>hout<br>gation) | Mitigation  | _  | nificance<br>h Mitigation) |
|--|-------------|---------------------------------|--|------|------------------------------|---|----|----------------------------|
|  |             |                                 | context and will be short-lived (cease once construction and reclamation is complete and areas rehabilitated). Air quality impacts can affect regional air quality beyond the site.  |      |                              | standards. Monitor PM10 and PM2.5 and report to NAEIS. if standards are exceeded, implement stricter dust control measures (wetting, chemical suppressants, road surfacing to name a few options to consider).  |    |                            |
| Fires<br>(accidental or<br>deliberate) | Air Quality | Deterioration<br>in air quality | If not mitigated, it is highly likely that the construction workforce will have cooking fires and potentially burn waste on site. This could easily lead to accidental veld fires which could spread regionally. The aspect is regarded as very sensitive and severity would be high. The risk is eliminated once the workforce leaves the site. | 56   | Moderate                     | Fires will not be allowed on site. Awareness training will also emphasize the risks and impact of fires. All waste to be managed in accordance with the Mine's waste management plan and applicable norms and standards. As a local land owner it is recommended that BML adheres to the guidelines set out by the local Fire Protection Association (LEFPA, http://www.lefpa.co.za/) and maintain the relevant | 40 | Moderate                   |



| Activity  | Aspect           | Impact /<br>Risks                            | Significance   | (wi | nificance<br>thout<br>igation) | Mitigation   | _  | nificance<br>th Mitigation) |
|---|------------------|--|--|-----|--------------------------------|--|----|-----------------------------|
|   |                  |  |  |     |                                | permits and fire-breaks in areas of their control.   |    |                             |
| Vegetation<br>clearance and<br>soil stripping<br>leading to<br>erosion and<br>subsequent<br>downstream<br>sedimentation | Surface<br>Water | Deterioration<br>of surface<br>water quality | Erosion is considered highly likely if not mitigated. Local surface water resources are very sensitive and the impact severity will be moderate-high and could affect the local catchment as long as construction and/or reclamation activities occur. | 56  | Moderate                       | Prevent erosion on site. Keep cleared areas to the minimum area required and install silt traps at discharge points of clean water systems to reduce impact likelihood, severity and extent.   | 24 | Low                         |
| Use of chemicals and chemical toilets on site during construction / reclamation activities                              | Surface<br>Water | Deterioration<br>of surface<br>water quality | If not managed, spills are highly probable. Chemical / sewage spills will have a high severity, and can affect the whole local area in the long term. Management measures will aim to prevent spills, and  | 64  | High                           | Contain dirty water on site as per GN704. Ensure facilities are constructed to prevent spills, and contain spills in the event of an accident. Implement Emergency Response Plans in the event of accidental spills. Appoint reputable contractor to service | 28 | Low                         |



| Activity  | Aspect           | Impact /<br>Risks                            | Significance   | Significance<br>(without<br>Mitigation) |      | Mitigation  |    | nificance<br>th Mitigation) |
|---|------------------|--|--|---|------|---|----|-----------------------------|
|   |                  |  | contain the extent of accidental spills.   |   |      | temporary toilets to ensure prevention of sewage spills.  |    |                             |
| Surface water runoff contaminating downstream environments.       | Surface<br>Water | Deterioration<br>of surface<br>water quality | There is always a possibility for water management infrastructure to overtop or leak. If this happens, it could affect the local catchment in the medium term in moderate-high severity.                                   | 28                                      | Low  | All infrastructure will be designed in accordance with GN704, and to contain the 1:100-year flood to prevent overtopping of dirty water containment infrastructure into clean water systems. Water containment infrastructure to be operated with adequate freeboard. | 28 | Low                         |
| Containment<br>of water on site<br>(in dirty water<br>catchments) | Surface<br>Water | Reduced<br>surface<br>water<br>availability  | The impact will definitely manifest as it is a legal requirement to contain dirty water on site. Due to the location of the new TSF at the old Bramber TSF footprint (which is also part of the dirty-water catchment) the | 65                                      | High | Maintain the Mine's dirty water footprint as small as possible. Ensure adequate rehabilitation of the TSF at closure to allow surface runoff to report back to the clean water system.  | 55 | Moderate                    |



| Activity                                    | Aspect      | Impact /<br>Risks                             | Significance  | Significance<br>(without<br>Mitigation) |          | Mitigation   | _  | nificance<br>th Mitigation) |
|---|-------------|---|---|---|----------|--|----|-----------------------------|
|   |             |   | impact is expected to<br>be slight but will be<br>permanent and could<br>affect the local<br>catchment.   |   |          |  |    |                             |
| Spills on site leaching to groundwater.     | Groundwater | Deterioration<br>of<br>groundwater<br>quality | Spills on site are highly probable if not managed/prevented. Groundwater is regarded as sensitive (specialist study in the EIA phase will confirm this). Impact severity will be moderate in the long term and could affect the whole local area. | 52                                      | Moderate | Spill prevention and management on site. Ensure dirty water is contained on site and treated prior to discharge. Ensure vehicle/machinery servicing, chemical storage etc. only occurs in purpose-built facilities with impervious floors. Groundwater monitoring as per IWUL. | 26 | Low                         |
| TSF and RWD impacts on groundwater quality. | Groundwater | Deterioration<br>of<br>groundwater<br>quality | It is highly likely that the new TSF (and the existing BTRP/New Bramber TSF and other TSFs on site) may have a permanent, moderate-high impact on regional groundwater. The EIA-  | 64                                      | High     | Ensure that seepage of contaminated water to groundwater from the new TSF is prevented (i.e. by lining of the facility and/or intercepting potential seepage and returning water to the dirty-water system). The   | 56 | Moderate                    |



| Activity   | Aspect              | Impact /<br>Risks                       | Significance  | (wil | nificance<br>thout<br>igation) | Mitigation   | _  | Significance<br>with Mitigation) |  |
|--|---------------------|---|---|------|--------------------------------|--|----|----------------------------------|--|
|  |                     |   | phase specialist study will confirm this.   |      |                                | eight specialist study will model the extent of potential contaminant transport and provide possible mitigation measures. It is expected that mitigation will be able to lessen the extent and severity of the impact.   |    |                                  |  |
| Construction<br>and presence<br>of the new<br>Fairview TSF | Visual<br>Resources | Alteration of<br>the Visual<br>Resource | The new TSF will definitely alter the visual resource, which is not regarded as sensitive against the backdrop of the other TSFs and mining infrastructure in this area. The severity of the impact will be slight to moderate (at most) considering the existing BTRP/New Bramber TSF. The Impact will be permanent and likely be visible on a local scale | 55   | Moderate                       | Implementation of the Mine's rehabilitation plan will lessen impact severity and duration to an extent (the TSF will still be present but blend in with its surroundings). Careful consideration to night-time lighting can also reduce impact severity and extent at night. | 35 | Low                              |  |



| Activity  | Aspect              | Impact /<br>Risks                       | Significance (   |    | nificance<br>thout<br>igation) | Mitigation   |    | Significance<br>(with Mitigation) |  |
|---|---------------------|---|--|----|--------------------------------|--|----|-----------------------------------|--|
| Reclamation of<br>the historic<br>dumps                       | Visual<br>Resources | Alteration of<br>the Visual<br>Resource | Reclamation activities will alter the visual resource, which is sensitive within the BNR. Severity is expected to be rather high but duration is not extensive and the topography will probably limit the zone of visual influence.                            | 45 | Moderate                       | Ensure the affected footprints are limited as far as possible and that adequate and concurrent rehabilitation (including shaping and revegetation) is implemented. No nightime activities should be allowed. | 35 | Low                               |  |
| Operation of machinery and equipment and movement of vehicles | Noise               | Increased<br>ambient<br>noise           | It is likely that the project activities will contribute to the generation of noise. In the context of the existing Mine, the aspect is not considered sensitive and the severity is not expected to be significant or audible beyond the activity footprints. | 30 | Low                            | No construction or reclamation activities should occur at night-time. Vehicles and machinery should be serviced regularly to prevent the noise these machines can generate if they are in disrepair.         | 27 | Low                               |  |



| Activity   | Aspect               | Impact /<br>Risks                                       | Significance  | (wit | nificance<br>thout<br>igation) | Mitigation   |    | Significance<br>(with Mitigation) |  |
|--|----------------------|---|---|------|--------------------------------|--|----|-----------------------------------|--|
| Movement of vehicles to and from reclamation activities                                  | Employee<br>safety   | Accidents / collisions on mountain roads                | If not mitigated, it is highly probable that employee safety will be negatively affected, considering the mountainous terrain. If the impact manifests it may be of high severity, permanent nature on an irreplaceable aspect (loss of life). Such impact would have a local extent and is regarded as high. Mitigation reduces the impact likelihood. | 72   | High                           | Ensure the road upgrades on the mountain roads include adequate safety measures (mirrors, line-of-sight where possible, speed-reducing-measures). Implement driver training. Prevent pedestrian use of roads in this area. | 36 | Low                               |  |
| Presence of employees on site for construction of TSF, roads and reclamation activities. | Safety &<br>Security | Workers accessing restricted areas outside of the site. | It is possible that workers at the mine may access areas outside of the site and give rise to security concerns. People employed by the mine are less likely to engage in criminal  | 32   | Low                            | Implement Environmental awareness training programs. Prevent access to unauthorised areas. Set up a community safety forum.  | 32 | Low                               |  |



| Activity                           | Aspect              | Impact /<br>Risks | Significance  |    | nificance<br>thout<br>igation) | Mitigation   |    | Significance<br>(with Mitigation) |  |
|------------------------------------|---------------------|-------------------|---|----|--------------------------------|--|----|-----------------------------------|--|
|                                    |                     |                   | activity than unemployed individuals. This is regarded as a very sensitive aspect given the crime statistics of the country, and the problems experienced with illegal mining in the area.  |    |                                |  |    |                                   |  |
| Presence of<br>new Fairview<br>TSF | Community<br>Safety | TSF Failure       | The TSF is being designed by qualified engineering teams to acceptable standards. However, there is always some possibility of failure which could result in loss of life (permanent loss of an irreplaceable aspect impacting on a local scale). The probability of this occurring is however regarded as low. | 36 | Low                            | There is always a risk of failure of impoundment infrastructure. All relevant engineering standards to be implemented in design and construction. Monitoring to be undertaken to ensure stability of infrastructure and prevent failure, which would impact downstream land uses and people. | 36 | Low                               |  |



| Activity                                       | Aspect                | Impact /<br>Risks   | Significance  | (wi | nificance<br>thout<br>igation) | Mitigation  |    | nificance<br>h Mitigation) |
|--|-----------------------|---|---|-----|--------------------------------|---|----|----------------------------|
| Reclamation of<br>dumps older<br>than 60 years | Heritage<br>Resources | Destruction<br>of historic<br>"structures"                | The impact will definitely manifest as the applicant is applying to reclaim material from these dumps. The specialist study in the EIA phase will confirm, but it is not expected that these dumps are sensitive. Impact severity will be high and permanent, but isolated. | 60  | High                           | No mitigation is possible, other than the no-go option which would mean the dumps will remain as they are (definitely obstructing and potentially polluting water resources).                           | 60 | High                       |
| Construction and reclamation activities        | Heritage<br>Resources | Damage to or destruction of undetected heritage resources | It is possible that other heritage resources, as yet unknown, may be damaged by the activities. Impacts to heritage resources are considered permanent, highseverity impacts on irreplaceable resources.  |     | Low                            | Undertake an Archaeological Impact Assessment in the EIA Phase to identify All heritage resources in proximity of potentially affected footprints, and implement the recommendations of the specialist. | 32 | Low                        |



#### 9 Plan of Study

The purpose of this section of the Scoping Report is to map a way forward to ensure that the EIA study will be undertaken in a manner that will include all relevant aspects of the proposed project in the context of the Project Site. This Plan of Study is set out as per the required contents of the Plan of study as contained in the EIA Regulations, 2014 (as amended), as follows:

- (i) a description of the alternatives to be considered and assessed within the preferred site, including the option of not proceeding with the activity;
- (ii) a description of the aspects to be assessed as part of the environmental impact assessment process;
- (iii) aspects to be assessed by specialists;
- (iv) a description of the proposed method of assessing the environmental aspects, including aspects to be assessed by specialists;
- (v) a description of the proposed method of assessing duration and significance;
- (vi) an indication of the stages at which the competent authority will be consulted;
- (vii) particulars of the public participation process that will be conducted during the environmental impact assessment process; and
- (viii) a description of the tasks that will be undertaken as part of the environmental impact assessment process;
- (ix) identify suitable measures to avoid, reverse, mitigate or manage identified impacts and to determine the extent of the residual risks that need to be managed and monitored.

The alternatives identified in this Scoping Report will be included in the EIA investigations to further refine the feasible Project options. Additional alternatives identified through the Public Participation Process (PPP) will also be included where feasible and where these are not further investigated, reasons will be provided.

The Aspects that will be assessed as part of the EIA Process will be the same aspects as identified in Section 8 of this Scoping Report. If additional aspects are identified through the PPP these will be added to the assessment as necessary. These aspects will in most instances be assessed by specialists. The terms of reference for the specialist studies commissioned as part of the EIA Process are provided in Section 9.1.

The impact assessment methodology proposed in Section 8.1 will be used in the EIA Phase to assess the significance of the identified impacts, though it is anticipated that a number of specialists will adopt alternative assessment methodologies specific to the relevant specialist field. Specialist studies will be attached to the EIA Report as appendices and the findings of the specialist impact assessments will be summarised in the EIA Report, according to the Impact Assessment Methodology described herein.

The future planned PPP, including authority consultation, is described in Section 6 of this report.

As the project description is further refined and the design of the new TSF completed, the activities associated with the Project which could be associated with impacts (either positive or negative) on the receiving environment (physical, biological and socio-cultural) will be expanded. Each activity associated with the proposed project throughout its development



phases (construction, operation, decommissioning & closure) will be included in the assessment. In summary, the tasks that will be undertaken as part of the EIA Process include:

- 1. Refine the project description to such an extent that the detail is sufficient to identify each project-related activity that could impact on the surrounding environment;
- 2. Describe the likely nature of the impacts (what aspect(s) of the environment are the activities likely to impact upon, is the impact positive or negative, is the impact avoidable or reversible, will the impact result in irreplaceable loss of resources etc.)
- 3. Define the significance of each impact, in the absence of management and mitigation measures, according to the Impact Assessment Methodology (Section 8.1).
- 4. Rank the impacts in order of significance and identify avoidance, management and/or mitigation measures for each that are appropriate to the impact significance.
- 5. Re-assess the impact significance taking the proposed management measures into account. Compile the management measures into a comprehensive EMP that must be implemented during the different project phases and against which compliance can be audited.
- 6. In addition to the management measures, formulate a monitoring and auditing plan for the proposed project to ensure the EIA/EMP is regularly updated and will remain valid and relevant throughout the LoM at Fairview, and that potential non-compliances can be addressed immediately.
- 7. Additional emphasis is placed on project completion and closure residual risk is anticipated and monitoring programmes prescribed along with a calculation of the financial provision required to ensure the Fairview Mine, specifically the proposed new TSF, will be rehabilitated satisfactorily.
- 8. Based on the impact significance, after mitigation measures have been applied, formulate a professional opinion on the benefits and risks of the project to assist the decision-making authorities in assessing the merit of the Project and reaching a decision on the Project (in its totality, or as pertains to different elements).
- 9. All the preceding steps go hand-in-hand with public and authority consultation as well as specialist input.

# 9.1 Specialist studies to be undertaken in the EIA Phase, and the specialists' terms of reference

A number of specialist assessments have been commissioned as part of the EIA process. The terms of reference for each study is provided in the sections below. These may be updated / refined based on feedback received from the authorities and/or during the PPP.

#### 9.1.1 Groundwater Study

This investigation will focus on updating the existing status quo of the regional groundwater system and quantify and qualify potential impacts of newly proposed activities on sensitive environmental receptors. The main objectives of the study are to:



- Determine the site baseline conditions (status quo) including the identification of sensitive environmental receptors and the status of the regional groundwater system (including aquifer classification, delineation and vulnerability assessment);
- Assess the results of geochemical test work undertaken by the Mine and Engineers and assess the potential for the long-term occurrence of acid mine drainage (AMD);
- Develop a numerical groundwater flow model and contaminant transport model with a source-term derived from the geochemical assessment; and
- Undertake a groundwater impact assessment including management and mitigation measures that could reduce or avoid impacts, and compile an integrated groundwater monitoring network and protocol.

#### 9.1.2 Surface water Study

The study will be initiated by the collation of all available surface water data to gain an understanding of the baseline hydrology of the affected areas. This will include climatic data and reports, topographical information, floodline and survey data and water quality monitoring data. Geographic Information Systems (GIS) software will be used to delineate catchments for the project area and define the hydrological characteristics thereof.

A floodline determination will then be undertaken on nearby watercourses, based on survey data provided by the Mine. Data will be converted into a digital elevation model (DEM) which can be used to calculate peak flows and delineate the 1:50-year and 1:100-year flood lines.

A stormwater management plan (SWMP) will be compiled for the new TSF as per the requirements of GN704 of the NWA pertaining to the separation of clean- and dirty water systems. The Mine's water balance will be updated to include the proposed new TSF.

A surface water impact assessment will be undertaken to determine all of the hydrological impacts associated with the proposed project aspects and formulate mitigation measures to alleviate impacts to surface water resources.

#### 9.1.3 Terrestrial Biodiversity (Flora and Fauna)

The Terrestrial Biodiversity assessment will be approached over two phases. As part of Phase 1 (Scoping), desktop information will be gathered to obtain background information on the project. As part of Phase 2 (EIA), field assessments will be undertaken, and assessment methods will be applied to characterise the Present Ecological State (PES) and Ecological Importance and Sensitivity (EIS) of the site and to identify ecosystems and biological assemblages at risk.

Once site specific issues have been identified, an impact assessment will be undertaken according to a pre-defined impact assessment methodology. The baseline ecological assessment reports will also highlight all management and mitigation measures deemed necessary in order to avoid and mitigate impacts associated with the proposed project.

The floral assessment will identify habitat types that could be affected by the proposed project, describe each habitat type in terms of conservation importance and PES and identify floral species associated with each habitat type. Focus will be on identifying protected or sensitive species of conservation concern (SCC) as well as alien invasive species that require management.



Faunal assessments will include assessment of mammals, avifauna, herpetofauna and invertebrates.

The aim is to identify all species that could potentially occur in the area, as well as confirm species that actually occur in the area. A Probability of Occurrence (POC) assessment will also be considered in order to quantify the importance of the study area in terms of faunal Species of Conservation Concern (SCC) conservation.

Based on the findings a detailed baseline study and impact assessment on all identified significant risks will take place and recommendations on management and mitigation measures (including opportunities and constraints) with regards to the proposed projects will be put forward to manage and mitigate impacts on the flora and fauna of the area.

#### 9.1.4 Freshwater ecological assessment

The Scope of Work includes an investigation of the freshwater resources within the study area, as well as the delineation of those freshwater resources within 500m thereof in fulfilment of Government Notice (GN)509 of 2016 as it relates to the National Water Act, 1998 (Act No. 36 of 1998) (NWA).

Current industry 'best practice' assessment methods will be applied to characterise the Present Ecological State (PES) and Ecological Importance and Sensitivity (EIS) of the freshwater ecological environment and to identify ecosystems and biological assemblages at risk.

A watercourse classification assessment will be undertaken according to the Classification System for Wetlands and other Aquatic Ecosystems in South Africa. User Manual: Inland systems (Ollis et al., 2013). Applicable buffer zones and/or zones of regulation according to relevant legislation or provincial guidelines will then be delineated around the watercourses

A detailed report will be generated for the environmental authorisation process, providing both qualitative and quantitative data on the PES of the freshwater resources associated with the study area. The studies will generate detailed site sensitivity maps and all results will be used to inform a detailed impact assessment, which will be undertaken according to a pre-defined impact assessment methodology, and key mitigatory measures in order to minimise impacts on both local and regional wetland and aquatic ecology will be highlighted.

#### 9.1.5 Hydropedological Assessment

Wetland hydrology is influenced by surrounding soil conditions and landscape position, amongst other factors. Whereas the ability of soils to recharge downstream wetlands and/or groundwater is largely driven by the hydraulic conductivity, which is influenced by porosity according to particle size distribution (texture). The hydro-pedological study investigates the inter-relationships between groundwater flow, surface flow and interflow.

Surveys will be undertaken using the signatures of the soil/water interaction visible in the morphology of soils to identify where water flows and to characterise the hydrological response. A conceptual hydrological response will then be developed for each affected hillslope to estimate and quantify stormwater controls.



#### 9.1.6 Heritage and Palaeontology

The National Heritage Resources Act (Act 25 of 1999) and the National Environmental Management Act (Act 107 of 1998) requires that the presence or absence of Heritage and/or palaeontological resources that may be affected by the proposed development be confirmed prior to initiating the development. If Heritage or palaeontological resources are identified on the project site, additional studies must be undertaken to ensure that the resources are protected.

In order to determine the likelihood of fossils occurring in the affected area geological maps, literature, palaeontological databases and published and unpublished records will be consulted. If fossils are likely to occur then a site visit must be made by a qualified palaeontologist to locate and assess the fossils and their importance. The only potential fossils in the area are microscopic and extremely old. A site visit is not considered necessary at this stage.

A site visit will be undertaken by a registered archaeologist to verify the heritage and archaeological resources that may be present at the site. It is known that the dumps targeted for reclamation are considered heritage resources by virtue of their age. Significant heritage resources (including graves) are known to occur in the area and will be identified by the archaeological impact assessment, and appropriate mitigation prescribed.

#### 9.1.7 Air Quality Impact Assessment

The Air Quality Impact Assessment (AQIA) will include a baseline assessment, emissions inventory, dispersion modelling and reporting.

The AQIA is required to ensure that dust and particulates from the proposed activities will remain within regulatory limits and that emissions management at the site will meet minimum standards.

The AQIA will involve the following:

- Baseline Assessment including a brief project description and description of the study site, surrounding sensitive receptors, surrounding land use and topography.
- Meteorological assessment: Met data will be evaluated to determine the local
  prevailing weather conditions, and its influence on the dispersion and dilution potential
  of pollutants released into the atmosphere. Should this not be available from the South
  African Weather Services, MM5 modelled met data, for input into the AERMOD model,
  from Lakes Environmental will be used as an alternative.
- Identification of existing sources of emissions and characterisation of ambient air quality at or near to the project site using available monitoring data.
- Discussion on the current legislative and regulatory air quality requirements.
- Literature review of the potential health effects associated with the criteria air pollutants of concern, and detailed literature review of emissions from all activities on site. Where information is not available on emission rates, USEPA or NPI emission factors will be used.
- Compilation of an emissions inventory for the project for criteria air pollutants and TSP.
- Dispersion modelling, using the AERMOD model, will be conducted in line with the South African National Regulations Regarding Air Dispersion Modelling, 2014. Potential



emissions from the proposed construction and operation and associated activities will be modelled, to determine the predicted ambient air pollutant concentrations. Comparison of the predicted concentrations will be made with the South African National Ambient Air Quality Standards and Dust Control Regulations to determine compliance

General recommendations will be provided regarding the mitigation and management of the identified potential impacts. This may include the implementation of an air quality monitoring programme.

#### 9.2 Closure and Rehabilitation Assessment

NEMA prescribes that mines must comply with the prescribed financial provision for the rehabilitation, closure and on-going post decommissioning management of negative environmental impacts arising from the mining operation.

The Financial Provision Regulations, 2015 (as amended), regulates the determination and provision as contemplated in NEMA for the costs associated with the management, rehabilitation and remediation of environmental impacts resulting from mining operations. The Regulations apply to applicants and holders of mining rights and permits. Draft Regulations have been published for comment in 2019, and if these are gazetted prior to completion of this study, they will be the primary regulations considered in calculating the quantum of financial provision for closure.

It is proposed that the financial liability associated with the proposed new TSF be calculated as a stand-alone quantum which can be added to the over-all Fairview financial provision should the project be approved. The scope will involve the compilation of an integrated report combining the Annual Rehabilitation Plan, Final Rehabilitation Plan, and Environmental Risk Assessment Report.

Rates will be obtained for demolition and / or removal of the various types of infrastructure and structures and the rehabilitation of areas from three different contractors, and an average cost will be calculated for the different rehabilitation activities that will be required.

#### 10 Assumptions and Limitations relevant to this Report

This Scoping Report has not yet incorporated the views of I&APs. The report is made available for a review and comment period of 30 days, and will be updated with comments received from authorities and the public following conclusion of the public review period.

The specialist studies that have been commissioned as part of this proposed project have not yet been completed. Where specialists contributed to the assimilation of baseline information, impacts or mitigation measures, such inputs have been referenced. Other information presented in this report is based on available desktop information. This report will therefore be updated as more site-specific specialist input is received.

The level of project detail presented in this report will be refined as engineering designs progress. It is not realistic to expect applicants in mining operations to undertake detail designs of the proposed operations prior to commencing with EIA –



- the early commencement of the Scoping & EIA Process enables the engineering teams to take environmental matters into consideration in their designs of project infrastructure, often resulting in improved options analysis and sustainable development; and
- undertaking of detailed designs is associated with significant expenditure. It is fair to allow an applicant the opportunity to evaluate the environmental and permitting feasibility of a project prior to advancing to a detailed design stage.

The level of project detail presented in this report is sufficient to ensure a realistic identification of potential impacts. In assessing the potential significance of those impacts, the precautionary principle was implemented and a worst-case scenario assessed in each instance.

#### 11 Conclusion

This scoping report pertains to the proposed development of a new TSF at the site of the old Bramber TSF, and the reclamation of historic waste dumps within the Fairview MRA.

It is acknowledged that the site of the proposed reclamation activities is located within an area which has been proclaimed as a nature reserve in terms of the NEMPAA, and it is also acknowledged that the Fairview Mining Right significantly predates the proclamation of the nature reserve. The Mining Right is a limited real right which grants the Holder (Barberton Mines Limited) the right to access, search for and mine and process gold resources within the Mining Right Area.

It is anticipated that the proposed project will be associated with a number of environmental impacts, associated with vegetation clearance, road upgrades and the TSF construction and operation. These potential impacts have been identified in this report and will be subject to specialist investigation and quantification in the EIA phase of the Project.

#### 11.1 Specific Information required

The scoping report must also address the matters referred to in section 24(4)(a) and (b) of the NEMA. The provisions of this section, and how these are addressed in this report are shown in Table 16:

Table 16: How the provisions of NEMA Section 24(4)(a) and (b) are addressed in this report

| Provision of NEMA Relevance to this application and report   |                                     |  |  |  |  |  |  |  |  |  |  |  |
|--|-------------------------------------|--|--|--|--|--|--|--|--|--|--|--|
| (4) Procedures for the investigation, assessment and communication of the potential consequences or impacts of activities on the environment – |                                     |  |  |  |  |  |  |  |  |  |  |  |
| (a) must ensure, with respect to every application for an environmental authorisation—   |                                     |  |  |  |  |  |  |  |  |  |  |  |
| (i) coordination and cooperation between   | The DMR has been identified as the  |  |  |  |  |  |  |  |  |  |  |  |
| organs of state in the consideration of  | competent authority in terms of the |  |  |  |  |  |  |  |  |  |  |  |



| Provision of NEMA   | Relevance to this application and report   |
|---|--|
| assessments where an activity falls under the jurisdiction of more than one organ of state;   | applications under the MPRDA, NEMA and NEMWA.  |
|   | The IWULA is being managed by Escon Consulting as a separate process, however the DWS is still included in the I&AP database and an integrated PPP is proposed.                                  |
|   | The relevant conservation authorities are also included in the consultation process.   |
| (ii) that the findings and recommendations flowing from an investigation, the general objectives of integrated environmental management laid down in this Act and the principles of environmental management set out in section 2 are taken into account in any decision made by an organ of state in relation to any proposed policy, programme, process, plan or project; | It is assumed that the decision-making authorities will take the provisions of section 2 of the NEMA into account when evaluating the Project.   |
| (iii) that a description of the environment<br>likely to be significantly affected by the<br>proposed activity is contained in such<br>application;   | Please see the baseline description in section 7 of this report. This information will be updated as specialist studies are concluded.   |
| (iv) investigation of the potential consequences for or impacts on the environment of the activity and assessment of the significance of those potential consequences or impacts; and   | A preliminary impact identification and assessment is presented in section 8 of this report. This will be expanded upon, refined and updated as the project and specialist assessments progress. |
| (v) public information and participation procedures which provide all interested and affected parties, including all organs of state in all spheres of government that may have jurisdiction over any aspect of the activity, with a reasonable opportunity to participate in those information and participation procedures; and   | The PPP is discussed in section 6 of this report. This report is being made available for a public comment period.   |
| (b) must include, with respect to every applicable—   | cation for an environmental authorisation and  |
| (i) investigation of the potential  | This is the scoping report and does not yet  |

include detailed investigation of potential

impacts or management measures. These

consequences or impacts of the alternatives

to the activity on the environment and

assessment of the significance of those

impacts,

potential consequences or



| Provision of NEMA  | Relevance to this application and report  |
|--|---|
| including the option of not implementing the activity;   | can only be assessed in detail in the EIA Phase of the project.   |
| (ii) investigation of mitigation measures to keep adverse consequences or impacts to a minimum;  | Alternatives are however discussed in this report, including the no-development option.   |
| (iii) investigation, assessment and evaluation of the impact of any proposed listed or specified activity on any national estate referred to in section 3(2) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999), excluding the national estate contemplated in section 3(2)(i)(vi) and (vii) of that Act; | Listed activities relevant to the proposed project are identified in this report. The impact(s) of these activities must be assessed in further detail in the EIA Phase.  A specialist archaeological and palaeontological impact assessment have also been commissioned as part of this project. |
| (iv) reporting on gaps in knowledge, the adequacy of predictive methods and underlying assumptions, and uncertainties encountered in compiling the required information;   | Current assumptions, limitations and gaps are highlighted in this report. This will be expanded upon as the studies progress.   |
| (v) Investigation and formulation of arrangements for the monitoring and management of consequences for or impacts on the environment, and the assessment of the effectiveness of such arrangements after their implementation;  | Monitoring and management measures are not included in this scoping report but will be included in the EIA phase.   |
| (vi) consideration of environmental attributes identified in the compilation of information and maps contemplated in subsection (3); and   | The baseline environment is described in this report and will be expanded upon as the studies progress.   |
| (vii) provision for the adherence to requirements that are prescribed in a specific environmental management Act relevant to the listed or specified activity in question.   | Provisions of the Waste Act, Heritage<br>Resources Act, Water Act and other relevant<br>legislation are included in this report.  |



#### 12 References

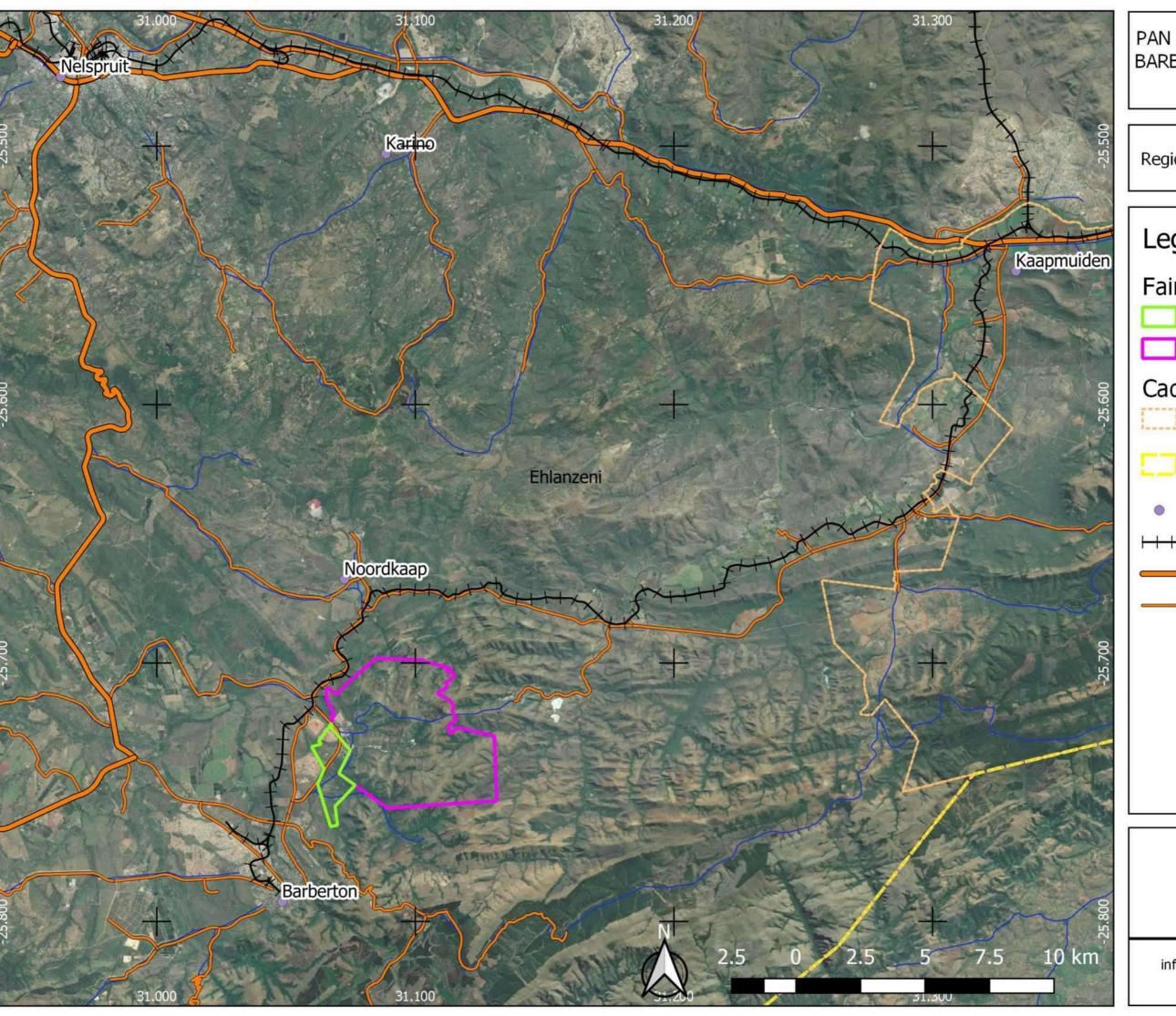
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**Appendix A: Maps and Plans** 

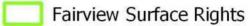


PAN AFRICA RESOURCES PLC: BARBERTON MINES (PTY) LTD **MPUMALANGA** 

Regional Location: Fairview Mine

# Legend

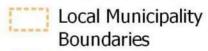
### Fairview Mine

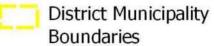




Fairview Mining Right Area

### Cadastral Data





Towns

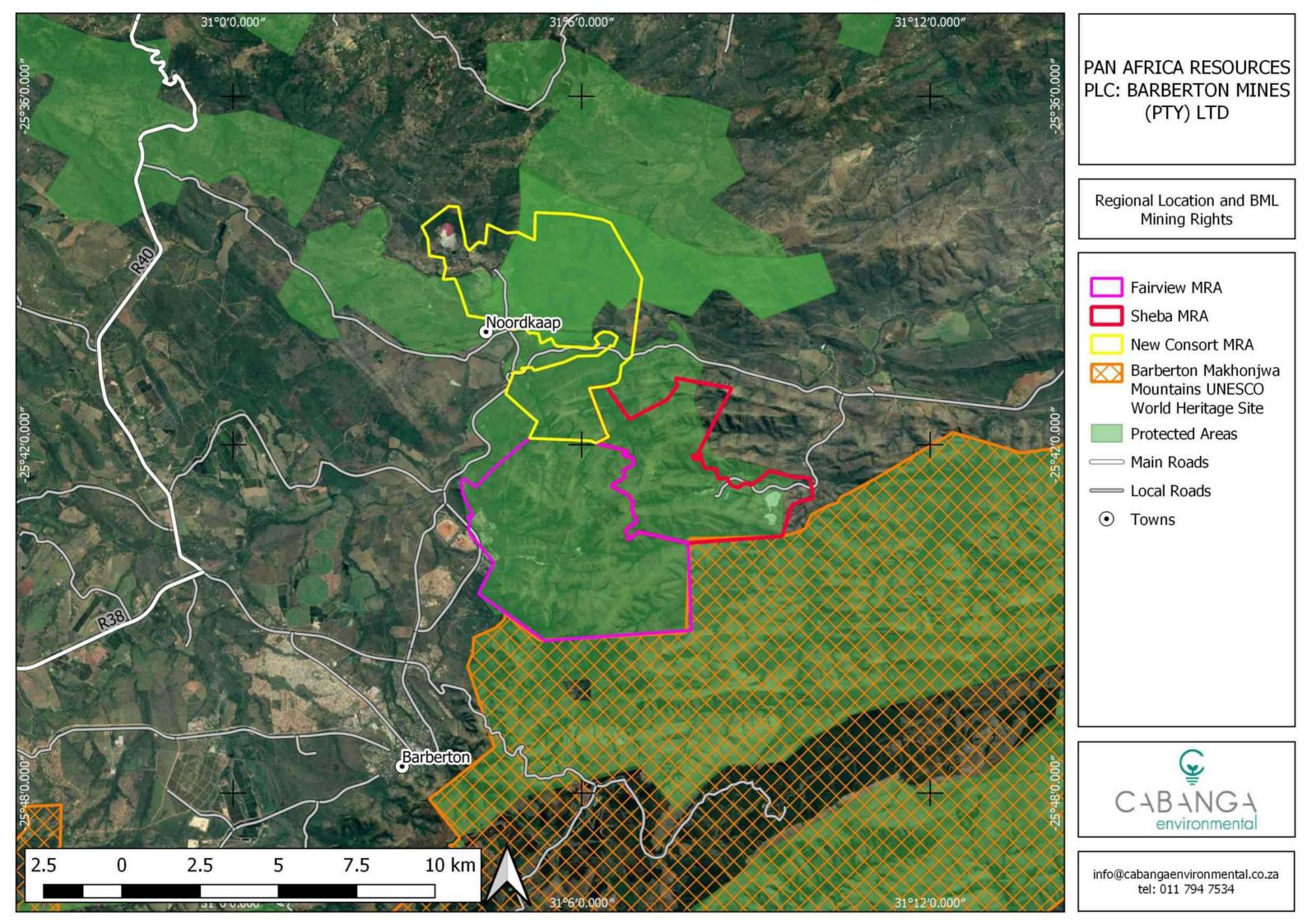
 ${\displaystyle \longmapsto}$  Railways

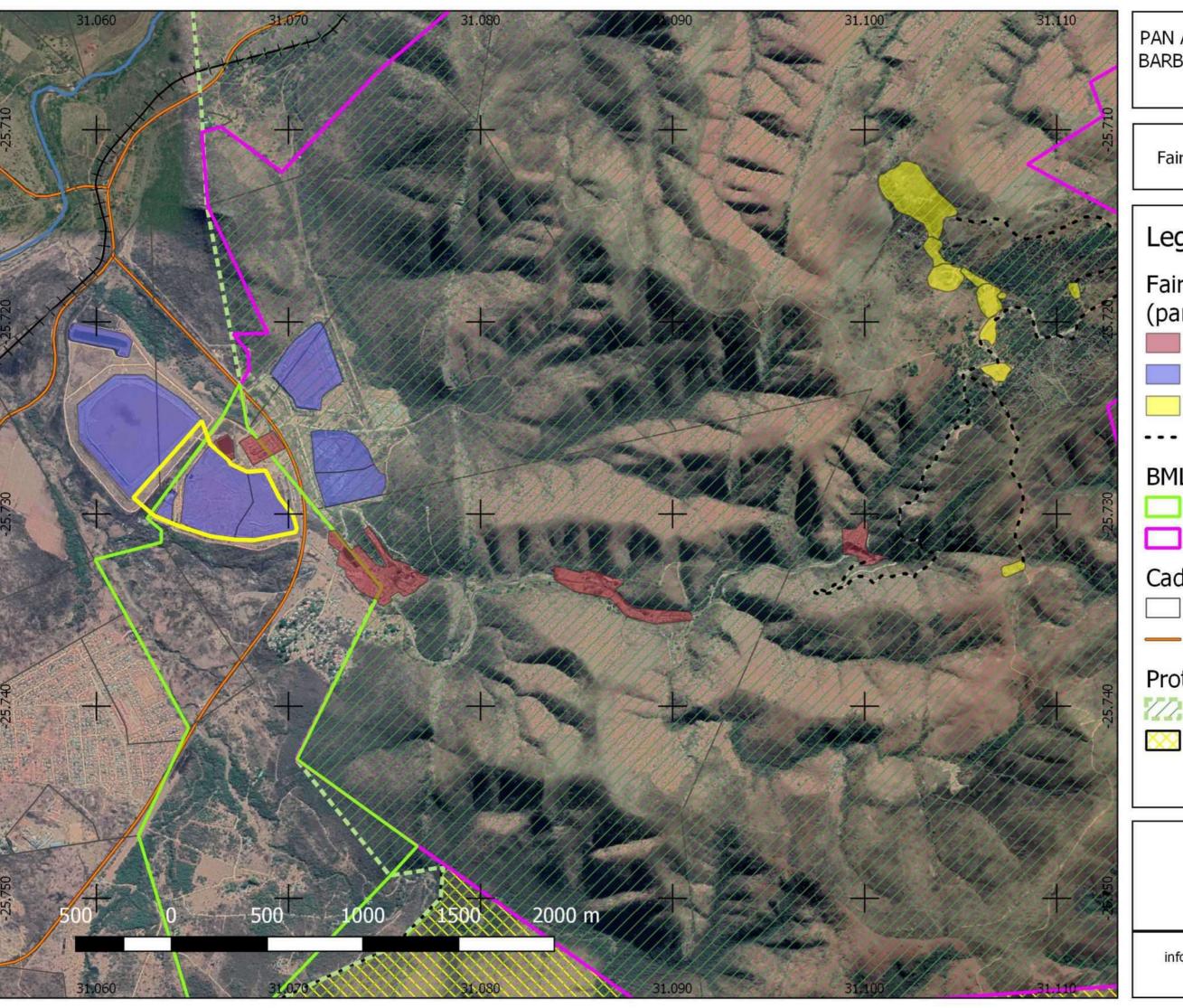
National Roads

**Provincial Roads** 



info@cabangaenvironmental.co.za tel: 011 794 7534





PAN AFRICA RESOURCES PLC: BARBERTON MINES (PTY) LTD **MPUMALANGA** 

Fairview Mine: Affected Areas

### Legend

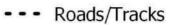
Fairview Mine (partial surface layout)



Processing Plants & Offices



Historic Dumps



BML\_MRAs

Fairview Surface Rights

Fairview Mining Right Area

Cadastral Info

Farm Boundaries

Provincial Roads

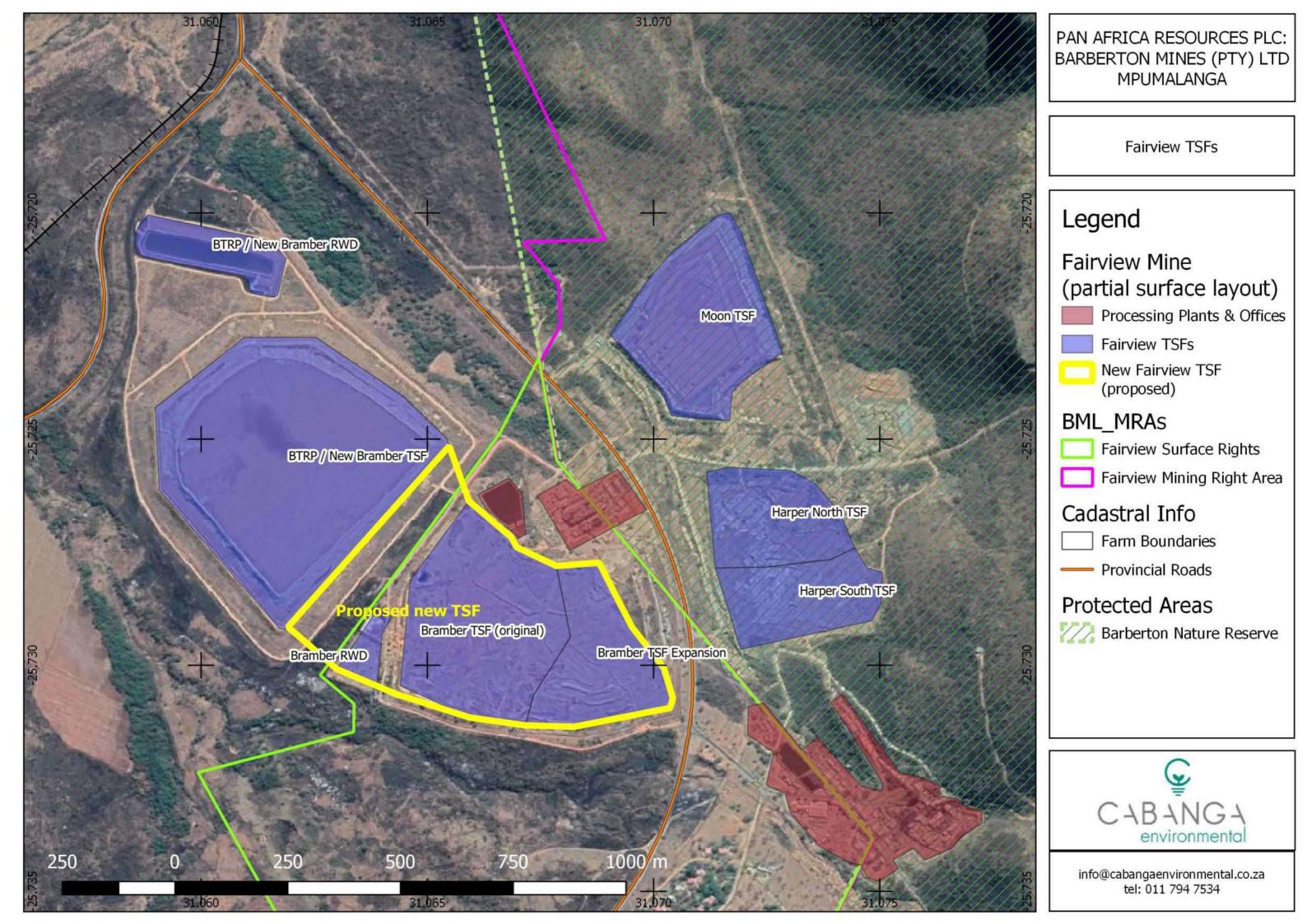
**Protected Areas** 

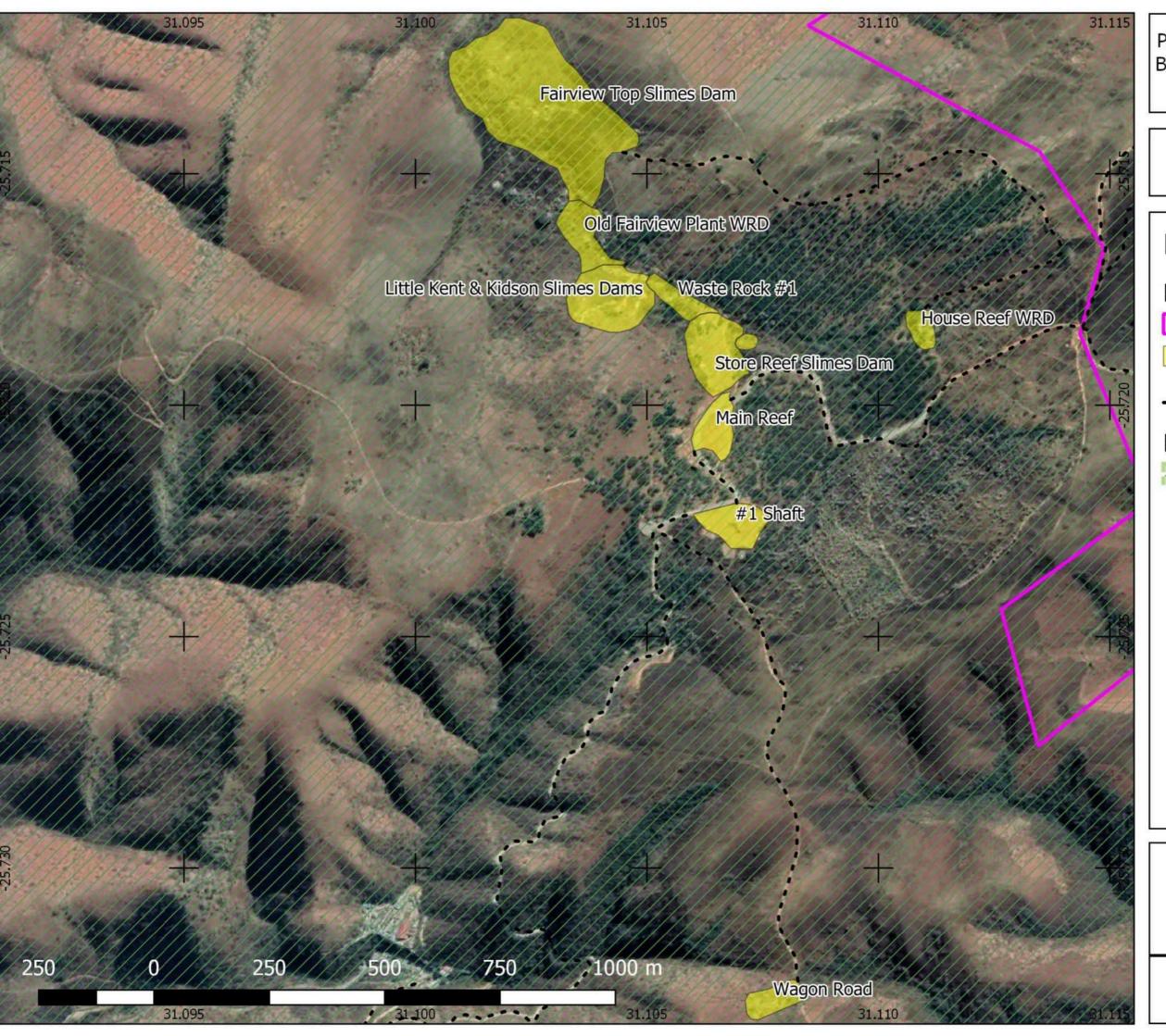
Barberton Nature Reserve

UNESCO WHS



info@cabangaenvironmental.co.za tel: 011 794 7534





PAN AFRICA RESOURCES PLC: BARBERTON MINES (PTY) LTD MPUMALANGA

Fairview Mine: Historic Dumps targeted for reclamation

## Legend

BML\_MRAs

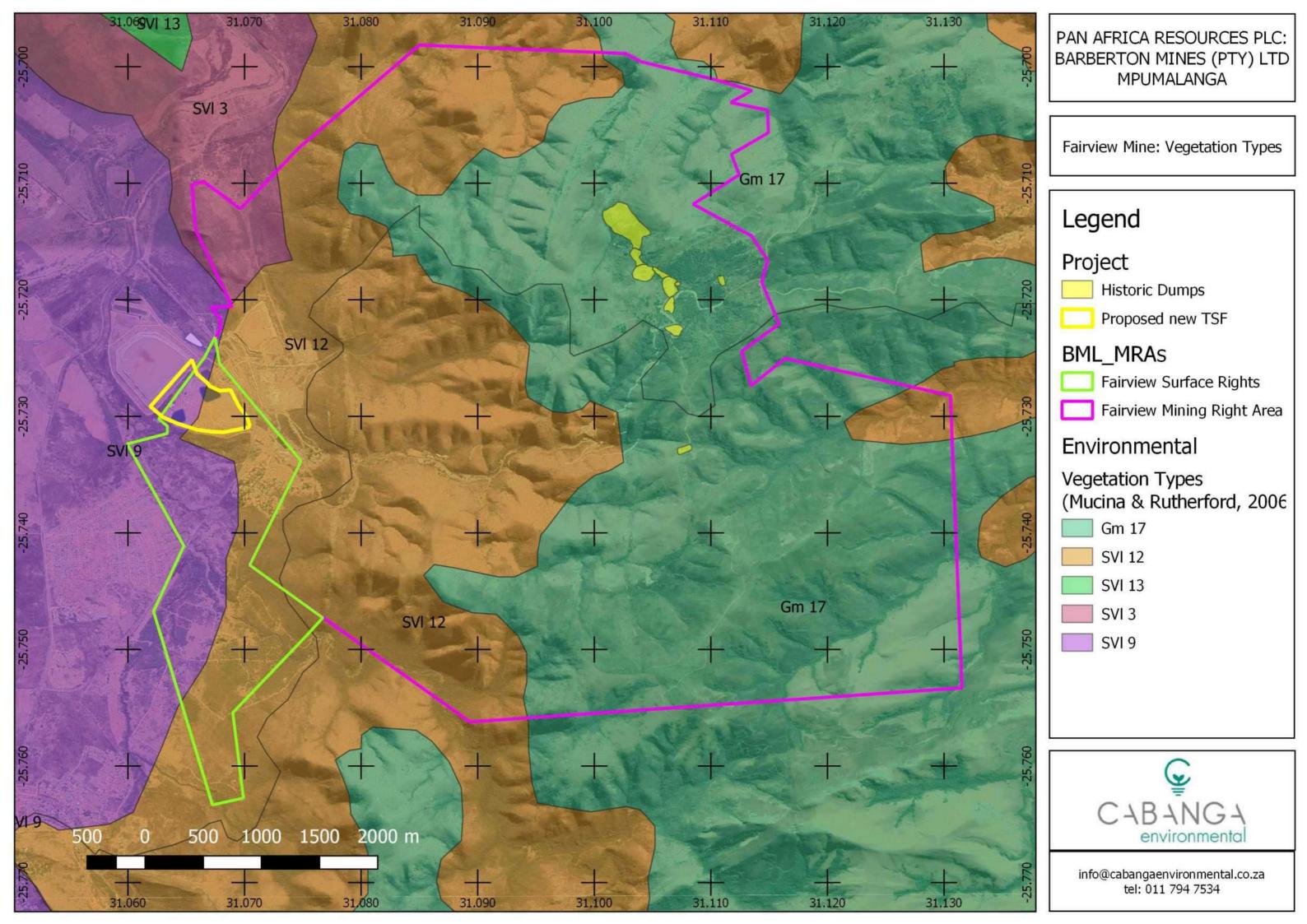
- Fairview Mining Right Area
- Dumps targeted for reclamation
- --- Roads / Tracks

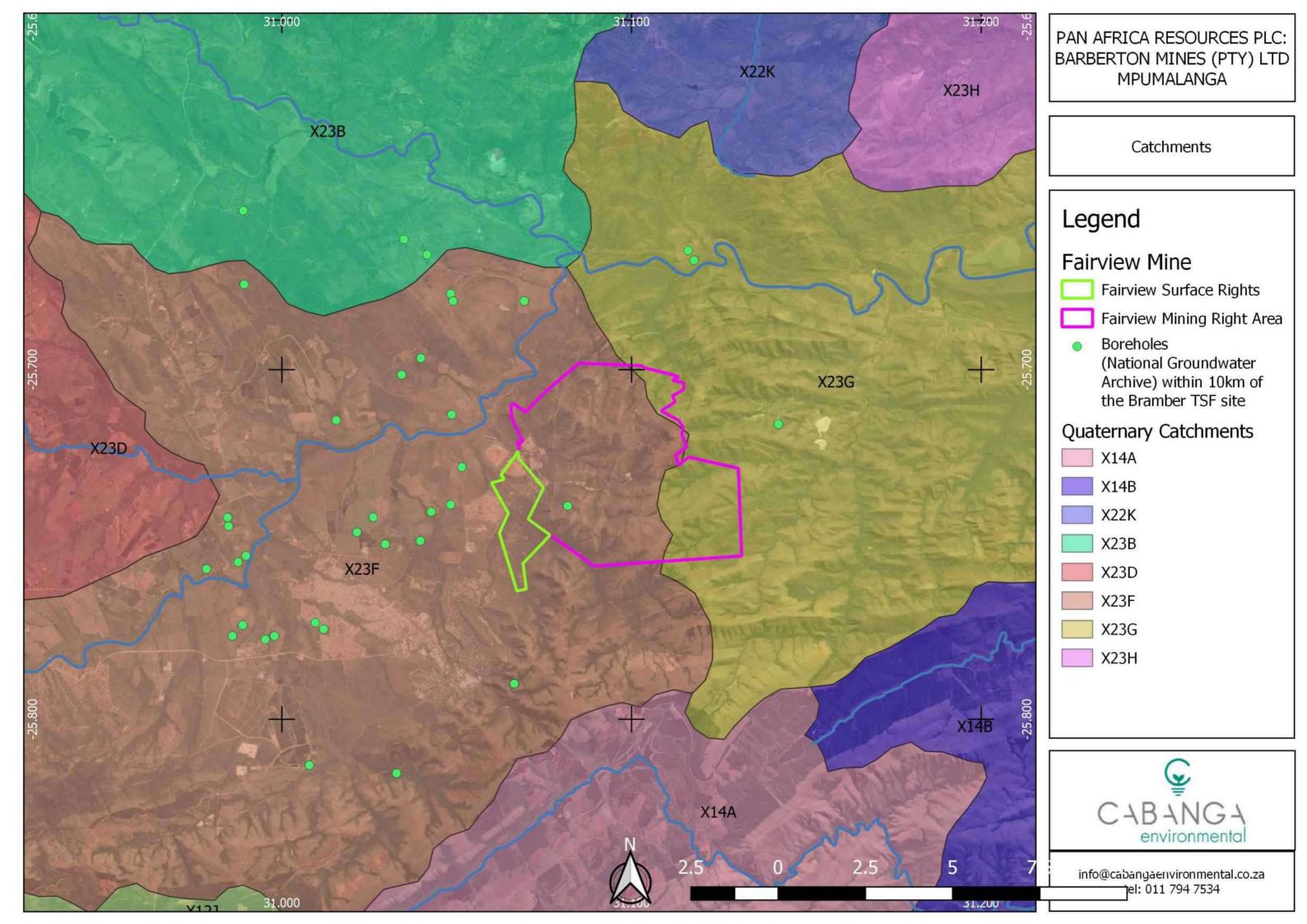
### **Protected Areas**

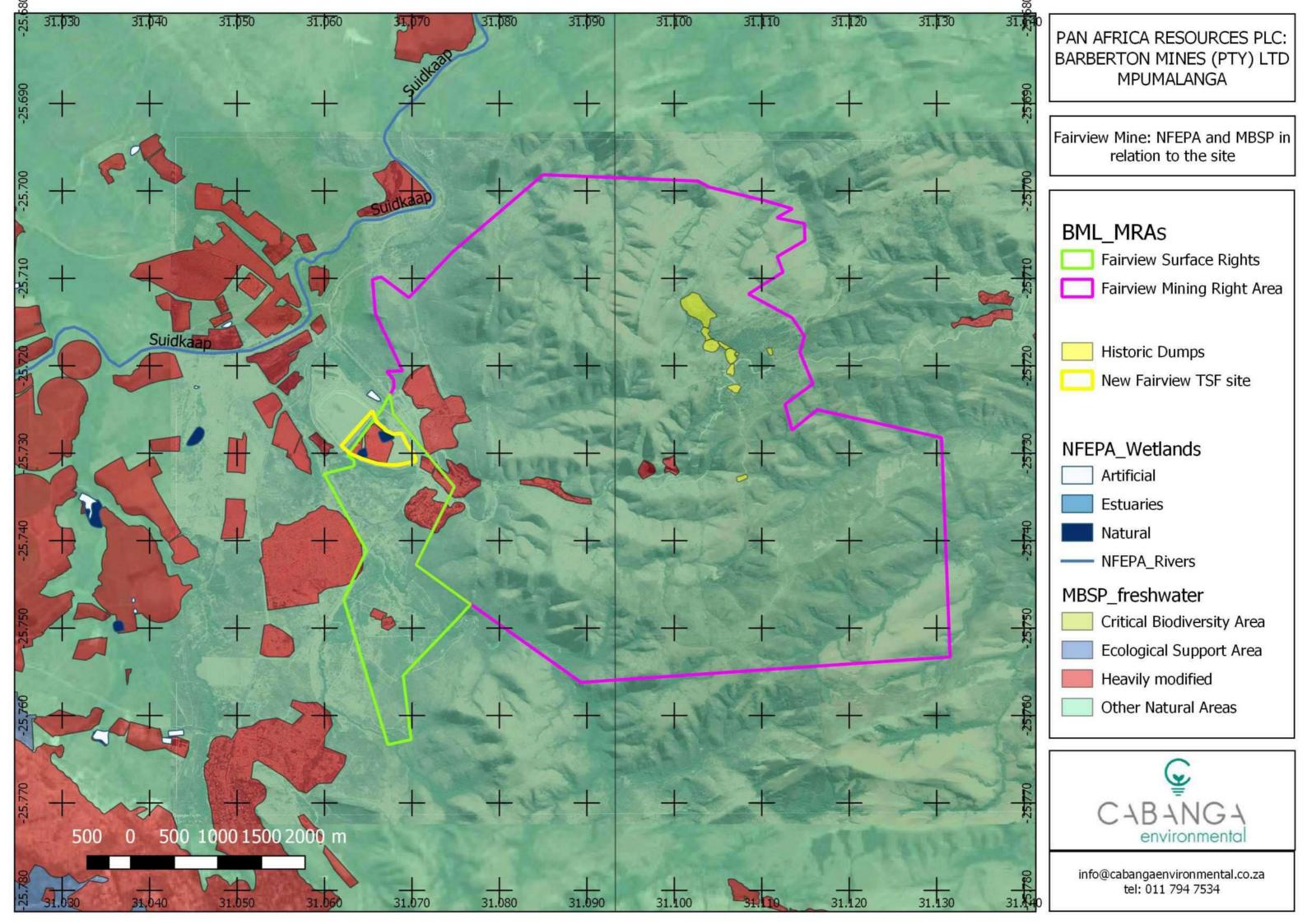
Barberton Nature Reserve



info@cabangaenvironmental.co.za tel: 011 794 7534

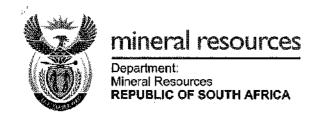








#### **Appendix B: Existing Rights and Licenses**



#### **CONVERTED MINING RIGHT**

Granted in terms of Item 7 of Schedule II of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002)

# Barberton Mines (Pty) Limited

Fairview Mine

DEPT. OF MINERALS AND ENERGY PRIVATE BAG X59 PRETORIA 0001

1 1 MAY 2011

MINERAL & PETROLEUM TITLES REGISTRATION OFFICE: PRETORIA

Fíle MP 30/5/1/2/2/191 MR F2005/08/12/004

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REGISTERED IN THE MINERAL & PETROLEUM TITLES

REGISTRATION OFFICE: PRETORIA

In the register of Mining

pp DIRECTOR-GENERAL:

Protocal No:

File Ref No F2005/08/12/004

Application No 191 MR

#### LET IT HEREBY BE MADE KNOWN:

THAT on this 28th day of April in the year 2011, before me, Wilma Nunes a Notary Public, duly sworn and admitted, residing and practising at Witbank, in the Mpumalanga Province of South Africa, and in the presence of the subscribing competent witnesses, personally came and appeared:

Mishack Sunday Mabaso, Acting, Regional Manager, Mpumalanga Region of the Department of Minerals and Energy, and as such in his / her capacity as the duly authorised representative of:

#### THE MINISTER OF MINERALS AND ENERGY

The said Regional Manager, being duly authorised thereto under and by virtue of a Power of Attorney granted by the DIRECTOR-GENERAL of the Department of Minerals and Energy on the 29th day of March in the year 2010 in terms of the powers delegated by the Minister on the 12<sup>th</sup> day of May 2004 in terms of section 103 (1) of the Act.

Converted Mining Right:: Converted in terms of item 7 of the Mineral and Petroleum Resources Development Act, No. 28 of 2002

#### AND

Ronald Allan Holding, (ID No 520522 5133 08 1), in his capacity as the company's representative, and as such, the duly authorised representative of Barberton Mines (Pty) Limited (Fairview Mine):

| 1 | 9 | 3 | 8   | 7 | 0 | 1 | 1 | 7 | 6 | 1 | 1 | 0 | 7 |  |
|---|---|---|-----|---|---|---|---|---|---|---|---|---|---|--|
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(Hereinafter together with his/her/its successors in title and assigns referred to as "the Holder", he, the sald representative, being duly authorised thereto under and by virtue of a power of attorney/resolution of directors of the Holder, signed or passed at Johannesburg on the 18th day of April in the year 2011 which power of attorney or a certified copy of a resolution has this day been exhibited to me, the notary, and remain filed of record in my protocol with the minutes hereof.)

#### AND THE MINISTER AND HOLDER DECLARED THAT:

WHEREAS The State is the custodian of the Nation's mineral and petroleum resources in terms of section 3 of the Act.

AND WHEREAS The Holder has applied for conversion of an old order mining right in terms of item

7 of Schedule 2 to the Act,

AND WHEREAS The DIRECTOR-GENERAL of the Department of Minerals and Energy has by

virtue of powers delegated to him, converted the Holder's old order, mining right in

terms of Item 7 of the Schedule to the Act.

NOW THEREFORE THE MINISTER CONVERTS THE HOLDER'S OLD ORDER MINING RIGHT SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

Converted Mining Right: Converted in terms of Item 7 of the Mineral and Petroleum Resources Development Act, No. 28 of 2002

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#### **Definitions**

In this mining right, the following words and expressions shall have the following meanings:

'Act' means the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002) and includes the Regulations, guidelines, circulars, directives and orders made in terms of that Act;

'Environmental Management Programme' is as defined in the Act and includes any other Environmental Management Programme approved in terms of the previous mining legislation;

`Financial year' means a complete financial year of the Holder which, at the time of the granting of this mining right, commences on 1st day of July in the year 2010; and ends on 30th day of June in the year 2011;

"Holder" is as defined in the Act, and specifically in relation to this right, it means Barberton Mines (Pty) Limited, Registration No/Identification No 1938/01176107;

`Mineral' is as defined in the Act, and specifically in relation to this right means Gold and Silver;

`Mining Area' is as defined in the Act and includes any additional area of environmental liability as may be reflected on the Environmental Management Programme relating to this right;

'Mining right' is as defined in the Act and includes all the Annexures to it, agreements and inclusions by reference;

'Mining Work Programme' is as defined in the Act and as reflected in the attached Annexure B to this mining right;

'Minister' means the Minister of Minerals and Energy and includes the successors in title, the assignee or any person duly authorised to act in the Minister's place and stead;

'Old order mining right' is as defined in the Schedule to the Act.

`Regional Manager' is as defined in the Act and specifically in relation to this right means the Regional Manager for the Mpumalanga Region of the Department of Minerals and Energy;

'Social and Labour Plan', is as contemplated in regulation 46 of the Regulations to the Act and is as reflected in the attached Annexure C to this mining right; and

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#### 1. Description of the Mining Area

The Mining Area shall comprise the following:

Certain:

Lots 119, 120, 123, 124, 126, 136, 137, 138, 140, 141, 142, 143 and 144 of

Section A Kaap Block and the farms Worral 352 JU, Bickenhall 346 JU and Hayward 310 JU, (but subject to Regulation 17 of the Mine Health and Safety Act, excluding any area within 100 metres of any public road, railway, cemetry, residential area or public area),

Situated:

Mpumalanga Magisterial/Administrative District of Barberton

Measuring:

3033,8643 hectares in extent.

(In the case of various farms being involved, a list can be attached and referred to as **Annexure** ); Which Mining Area is described in detail on the attached Diagram/plan marked **Annexure A**.

#### 2. Conversion of Old Order Mining Right

Without detracting from the provisions of Item 7 of the schedule to the Act, sections 5 and 25 of the Act, the Minister converts the holder's old order right and grants to the Holder the sole and exclusive right to mine, and recover the mineral/s in, on and under the mining area for the Holder's own benefit and account, and to deal with, remove and sell or otherwise dispose of the mineral/s, subject to the terms and conditions of this mining right, the provisions of the Act and any other relevant law in force for the duration of this right.

#### 3. Commencement, Duration and Renewal

- 3.1. This mining right shall commence on 28 April 2011 and, unless cancelled or suspended in terms of clause 13 of this right and or section 47 of the Act, will continue to be in force for a period of 10 (Ten) years ending on 27 April 2021.
- 3.2. The Holder must continue to conduct mining operations failing which this right may be cancelled or suspended.
- 3.3. Any application for renewal must be submitted to the Regional Manger not later than 60 working days prior to the date of expiry of this right.

#### 4. Amendments, Variation and Abandonment

4.1. The terms of this right (including by extension of the area covered by it or by the addition of minerals or a share or shares or seams, mineralized bodies, or strata, which are not at the time the subject thereof) may not be amended or varied without the written consent of the Minister.

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- 4.2. The Holder shall be entitled to abandon or relinquish the right or the area covered by the right entirely or in part. Upon abandonment or relinquishment of the mining area or any portion thereof, the Holder must:
- 4.2.1. Furnish the Regional Manager with all prospecting and /or mining results and/or information, as well as the general evaluation of the geological, geophysical and borehole data in respect of such abandoned area in so far as it applies to the mineral or any other mineral/s obtained in respect of this right and,
- 4.2.2. Apply for a closure certificate in terms of section 43 (3) of the Act.
- 4.3 With effect from the date the Holder has abandoned or relinquished a portion or portions of the mining area, and subject to section 43 of the Act, the Minister is entitled to grant any right, permit, or permission referred to in the Act in, on, or under the portion/s, so abandoned or relinquished, to any person/s.

#### 5. Payment of Royalties and other Monles

- 5.1. The Holder shall as contemplated in section 25 (2) (g) pay to the State throughout the duration of this mining right, any royaltles payable in terms of any Act or Amendment to an Act of Parliament implemented.
- 5.2. If, prior to the commencement of the Act, the Holder of this right paid any royalties, levies, fees, or consideration to the state, the Holder shall continue to pay same applicable to such old order mining right until such time a relevant Act of parliament is implemented.

#### 6. Payment of Interest

If mining fees, any fees, any levy, royalties or consideration referred to in clause 5 are not paid punctually, the Holder shall be in <u>mora</u> and shall pay interest thereon at the rate prescribed in terms of section 80 of the Public Finance Management Act, 1999(Act 1 of 1999) reckoned from the date on which payment is due and payable, to the date of actual payment.

#### 7. Restrictions and Obligations Imposed on the Holder

- 7.1 The Holder is entitled to the rights referred to in section 5(2), (3) and section 25 of the Act, and such other rights as may be contained in this mining right or such other right as may be granted to, acquired by or conferred upon the Holder by any other applicable law.
- 7.2 Mining operations in the mining area must be conducted in accordance with the Mining Work Programme and any amendment to such Mining Work Programme and an approved Environmental Management Plan.

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7.3 The Holder shall not trespass or enter into any homestead, house or its curtilage nor interfere with or prejudice the interests of the occupiers and/or owners of the surface of the Mining Area except to the extent to which such interference or prejudice is necessary for the purposes of enabling the Holder to properly exercise the Holder's rights under this mining right.

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#### 8. Conditions on disposal of Minerals and/ or Products Derived from Mining

It is a condition of the conversion of this old order mining right that the Holder shall dispose of all minerals and/ or products derived from the exploitation of the mineral at competitive market prices which shall mean in all cases, non-discriminatory prices or non-export parity prices. If the minerals are sold to any entity, which is an affiliate or non-affiliated agent or subsidiary of the Holder, or is directly or indirectly controlled by the Holder, such purchaser must unconditionally undertake in writing to dispose of the minerals and any products produced from the minerals, at competitive market prices.

#### 9. Mortgage, Cession, Transfer, and Alienation

This mining right, a shareholding, an equity, an interest or participation in the right or joint venture, or a controlling interest in a company, close corporation or joint venture, may not be encumbered, ceded, transferred, mortgaged. let, sublet, assigned, alienated or otherwise disposed of without the written consent of the Minister, except in the case of a change of controlling interest in listed companies.

#### Protection of Boreholes, Shafts, Adlts and Openings.

All boreholes, shafts, Adits, excavations, and openings sunk or made, by the Holder during the currency of this mining right shall be sealed, closed, fenced, made safe by the Holder in accordance with the approved Environmental Management Programme, the Mine Health and Safety Act, 1996 or any other applicable laws and Regulations.

#### 11. Holder's Liability for payment of Compensation for Loss or Damage

- 11.1. Subject to section 43 of the Act, the Holder shall, during the tenure of this right while carrying out the mining operations under this right, take all such necessary and reasonable steps to adequately safeguard and protect the environment, the mining area and any person/s using or entitled to use the surface of the mining area from any possible damage or injury associated with any activities on the mining area.
- 11.2. Should holder fail to take reasonable steps referred to above, and to the extent that there is legal liability, the holder shall compensate such person or persons for any damage or losses, including but not limited to damage to the surface, to any crops or improvements, which such person or persons may suffer as a result of, arising from or in connection with the exercise of his/her rights under this mining right or of any act or omission in connection therewith.

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#### 12. Inspection of Mining Area

The Minister and/or any person duly authorised thereto in writing by the Minister shall be entitled to inspect the mining area, the Holder's mining operations and the execution of the approved Environmental Management Programme on the Mining Area as provided for in the Act, and any instruction conveyed in writing by the Minister to the Holder requiring the proper performance by the Holder of the Holder's obligations under this mining right shall be put into effect by the Holder in terms of the Act.

#### 13. Cancellation or Suspension

- 13.1 Subject to section 47 of the Act, this mining right may be cancelled or suspended if the Holder:
- 13.1.1 Submits inaccurate, incorrect and or misleading information in connection with any matter required to be submitted under the Act;
- 13.1.2 Fails to honour or carry out any agreement, arrangement, or undertaking, including the undertaking made by the Holder in terms of the Broad Based Socio Economic Empowerment Charter and Social and Labour plan, on which the Minister relied for the conversion of this right;
- 13.1.3 Breaches any material term and condition of this mining right;
- 13.1.4 Conducts mining operations in contravention of the provisions of the Act;
- 13.1.5 Contravenes the requirement of the approved Environmental Management Programme; or
- 13.1.6 Contravenes any provisions of this Act in any other manner.
- 13.2 Before the Minister cancels or suspends this right, the Minister shall:
- 13.2.1 Give written notice to the Holder indicating the intention to suspend or cancel this right;
- 13.2.2 Give reason/s why the Minister is considering the suspension or cancellation of this right;
- 13.2.3 Give the Holder 30 days to show reasons why the right should not be suspended or cancelled;
- 13.2.4 Notify, the mortgagee [if any], of the Intention to suspend or cancel this right; and
- 13.2.5 Direct the Holder, where it is possible to remedy any contravention, breach or failure, to comply or to take such specified measures to remedy any contravention, breach or failure to comply.
- 13.3 If the Holder does not take the measures as specified by the Minister to remedy a contravention, breach or failure, the Minister may cancel or suspend this right after considering representations made by the Holder in terms of clause 13.2.3.

#### 14. Records and Returns

14.1. The Holder shall maintain all such books, plans and records in regard to mining on the Mining Area as may be required by the Act and shall furnish to the office of the Regional Manager such reports and documents as may be relevant under this right.

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14.2. The Holder shall furnish to the Regional Manager all such monthly returns contemplated in section 28 (2) A of the Act not later than the 15<sup>th</sup> day of the month following the month in respect of which it was reported.

14.3 The Holder shall furthermore at the end of each year following commencement of this mining right, inform the Regional Manager in writing of any new developments and of the future mining activities planned in connection with the exploitation/mining of the minerals on the Mining Area.

#### 15. Minister's liability for Payment of Compensation

The Minister shall not at any time be liable or responsible for the payment of compensation of whatever nature to the Holder, the Holder's successors-in-title or assignee, or any person whomsoever as a result of the conversion of this right.

#### 16. Compliance with the Laws of the Republic of South Africa

The conversion of this Right, does not exempt the Holder and its successors in title and/or assigns from complying with the relevant provisions of the Mine Health and Safety Act, (Act No.29 of 1996) and any other law in force in the Republic of South Africa.

#### 17. Provisions relating to section 2(d) and (f) of the Act

In the furthering of the objects of this Act, the Holder is bound by the provisions of an agreement or arrangement dated 18 June 2009 entered into between the Holder/ empowering partner and Shanduka Gold (Pty) Limited and Shanduka Resources (Pty) Limited (the empowerment partner) which agreement or arrangement was taken into consideration for purposes of compliance with the requirements of the Act and or Broad Based Economic Empowerment Charter developed in terms of the Act and such agreement shall form part of this right.

#### 18. Social and Labour Plan

- The holder must annually, not later than three months before the end of its financial year, submit a detailed implementation plan to give effect to Regulation 46(e) (i), (ii) and (iii) in line with the Social and Labour Plan.
- 18.2 The holder must annually, not later than three months after finalisation of its audited annual report, submit a detailed report on the implementation of the previous year's social and labour plan.

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## 19. Severability

Notwithstanding anything to the contrary, any provision of this mining right which is contrary to any provision of the Act or which is otherwise ultra vires, null and void, voidable, or unenforceable, shall be severable from the rest of this right, such rest thus being and remaining of full force, effect and enforceable.

## 20. Domicilia citandi et executandi

20.1. The parties hereto choose the following addresses as their domicilia citandi et executandi and for all purposes arising from this mining right, in particular for the purposes of serving of any notice in terms of this mining right, and any notice properly addressed to the under mentioned postal addresses of the parties shall be deemed to have been received by the addressee within 14 days if given in writing and posted by prepaid registered post addressed to the addressee at the relevant postal address:

### 20.1.1. In the case of the Minister.

| Physical Address                  | Postal Address    |
|-----------------------------------|-------------------|
| Province House                    | Private Bag X7279 |
| Cnr. Botha and Paul Kruger Street | WITBANK           |
| WITBANK                           |                   |
| Code <b>1035</b>                  | 1035              |
| Tel 013 656 1448                  | 013 656 1448      |
| Fax 013 656 0932                  | 013 656 0932      |

# 20.1.2. In the case of the Holder.

| Physical Address               | Postal Address |
|--------------------------------|----------------|
| Barberton Mines                | P O Box 121    |
| Fairview Mine                  |                |
| Kaapmuiden/Malelane Road (R38) |                |
| BARBERTON                      | BARBERTON      |
| Code 1300                      | 1300           |
| Tel 013 712 8500               | 013 712 8500   |
| Fax 013 712 9060               | 013 712 9060   |

20.2. Notwithstanding anything to the contrary herein contained, a written notice or communication actually received by a party at any place other than the chosen *domicilia citandi et executandi* 

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shall constitute adequate notice or communication to the party notwithstanding that it was not sent to or delivered at such party's chosen domicilium citandi et executandi.

- 20.3 Either party shall be entitled from time to time to change the *domicilia citandi et executandi* or postal address furnished above after giving at least 14 days prior written notice of such change to the other party, falling which the above mentioned addresses will remain in force.
- 20.4. Any written notice or communication contemplated in this clause which is forwarded by one party to the other by registered post will be presumed to have been received by the addressee on the fourteenth day following the date of posting from an address within the Republic of South Africa to the addressee at the postal address of the addressee for the time being as determined in accordance with the provisions of this clause.

### 21. Costs

The Holder shall pay all costs and charges incurred in connection with the execution and registration of this prospecting right.

Thus done and signed at Witbank on the 28th day of April in the year 2011 in the presence of the undersigned witnesses:

**AS WITNESS:** 

For and on behalf of the Minister

For and on behalf of the Holder



Private Bag X313, Pretoria, 0001, Sedibeng Building, 185 Francis Baard Street, Pretoria, Tel: (012) 336-7500, Fax: (012) 326-4472/ (012) 326-2715

# LICENCE IN TERMS OF CHAPTER 4 OF THE NATIONAL WATER ACT, 1998 (ACT NO. 36 OF 1998) (THE ACT)

I, Sifiso Mkhize, in my capacity as Director General (Acting) in the Department of Water and Sanitation (herein after referred to as the Department) and acting under authority of the powers delegated to me by the Minister of Water and Sanitation, hereby authorise the following water uses in respect of this licence.

LICENCE NO: 04/X23F/ABEFGJ/4725

FILE NO: 27/2/2/X23F/071

1. Licensee:

Postal Address:

Barberton Mines (Pty) Ltd: Fairview Mine

PO Box 121 BARBERTON

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2. Water Uses

2.1 Section 21(a) of the Act:

Taking of water from a water resource, subject to

the conditions set out in Appendices I and II.

2.2 Section 21(b) of the Act:

Storage of water, subject to the conditions set out in

Appendices I and III

2.3 Section 21 (e) of the Act

Engaging in a controlled activity; Irrigation of any

land with waste or water containing waste, subject to the conditions set out in Appendices I and IV

2.4 Section 21 (f) of the Act:

Discharging waste or water containing waste into

water resource, subject to the conditions set out in

Appendices I and V

2.5 Section 21(g) of the Act:

Disposing of waste in a manner which may

detrimentally impact on a water resource, subject to

the conditions set out in Appendices and VI.

2.6 Section 21 (j) of the Act:

Removing, discharging or disposing of water found underground, subject to the conditions set out in

Appendices I and VII.

# 3. Properties on which the use will be exercised

- 3.1 Remaining extent of Fairview 708 JU
- 3.2 Remaining extent of Hayward 310 JU
- 3.3 Remaining extent of Fairview 708 JU
- 3.4 Greenstone 917 JU Portion 82
- 3.5 Section A Kaap Block 123
- 3.6 Section A Kaap Block Lot 123
- 3.7 Remaining Extent of Bramber, South 349 JU
- 3.8 Worrall 352 JU

# 3. Registered owners of the Properties

Table 1: Property details

| Properties |  | Registered Owner/lease agreement | Title deeds            |  |
|------------|--|----------------------------------|------------------------|--|
| 3.1        | Remaining extent of Fairview 708 JU      | Department of Public Works       | T 122700/2006          |  |
| 3.2        | Remaining extent of Hayward 310 JU       | Department of Public Works       | T 122 <b>7</b> 00/2006 |  |
| 3.3        | Remaining extent of Fairview 708 JU      | Department of Public<br>Works    | T 122700/2006          |  |
| 3.4        | Greenstone 917 JU Portion 82             | Department of Public<br>Works    | T 122700/2006          |  |
| 3,5        | Section A Kaap Block 123                 | Department of Public Works       | <u>T</u> 122700/2006   |  |
| 3.6        | Section A Kaap Block Lot 123             | Department of Public<br>Works    | T 122700/2006          |  |
| 3.7        | Remaining Extent of Bramber South 349 JU | Department of Public<br>Works    | T 122700/2006          |  |
| 3.8        | Worrall 352 JU                           | Department of Public<br>Works    | T 122700/2006          |  |

# 4. Licence and Review Period

This licence supersedes the licence no 05/X23F/ABFGIJ/744 dated 08 July 2011 and is valid for a period of ten (10) years from the date of issuance, it may be reviewed at an interval not exceeding five (5) years.

# 5. Definitions

Any terms, words and expressions as defined in the National Water Act, 1998 (Act 36 of 1998) shall bear the same meaning when used in this licence.

Inkomati Usuthu Catchment Management Agency Private Bag X 11214 DirectorNelsprait A26Rg)

<sup>&</sup>quot;Department" means the Department of Water and Sanitation.

<sup>&</sup>quot;Minister" means the Minister of Water and Sanitation.

"CEO" means the Chief Executive Officer of the Inkomati-Usuthu Catchment Management Agency and/ or his/her representative, Private Bag X11214, Mbombela, 1200.

"Act" means the National Water Act, 1988 (Act 36 of 1998)

"Report" refers to the reports entitled;

- (i) Integrated Water Use Licence Application Technical Report dated April 2009, compiled by Geovicon Environmental (Pty) Ltd.
- (ii) Integrated Waste and Water Management Plan for the Fairview Operation dated March 2013, compiled by SLR Global Environmental Solutions.
- (iii) Barberton Mines (Pty) Ltd Social and Labour Plan dated June 2013, compiled by Barberton (Pty) Ltd.
- (iv) Fairview Mine Water Use Licence Amendment Application dated November 2013, compiled by Synergistic Environmental Services (Pty) Ltd.
- (v) Geotechinical Report Barberton Tailings Re-Treatment Project dated September 2012, compiled by K. Schwartz.
- (vi) Barberton Tailings Re-Treatment Project New Bramber Tailings Storage Facility –
   Design Report dated October 2013, compiled by Stefanutti Stocks.
- (vii) Fairview Mine Water Quality Report dated April 2010, compiled by Geovicon Environmental (Pty) Ltd.
- (viii) Barberton Mines (Pty) Ltd Annual Water Quality Monitoring Reported dated February 2011 January 2012, compiled by Synergistic Environmental Services (Pty) Ltd.
- (ix) Barberton Mine Groundwater Pollution Prediction dated March 2011, compiled by Metago.
- (x) Barberton Mines Acid Base Accounting dated April 2011, Compiled by Metago
- (xi) Barberton Mines (Pty) Ltd Fairview Gold Mine Aquatic Biomonitoring dated October 2013, compiled by Nepid Consultants.
- (xii) Barberton Mines Storm Water Management Plan Scoping Report dated February 2013, compiled by SLR Global Environmental Solutions.
- (xiii) Geochemical, Hydrochemical and Toxicity Testing at Barberton Mines dated March 2013, compiled by Jones & Wagner.
- (xiv) Rehabilitation Strategy and Implementation Programme for Barberton Mines dated March 2013, compiled by SLR Global Environmental Solutions.
- (xv) Geotechnical Report on Cyclone Test Work Executed on Barberton Biox / Float Tailings for the proposed TSF dated 2012, compiled by Stefanutti Stocks.
- (xvi) Geotechnical Report on Cyclone Test Work Executed on Barberton Biox / Float Tailings for the proposed TSF dated 2013, compiled by Stefanutti Stocks, as well as other related documentations and communication (emails, letters, verbal, etc) related to.

# 6. Description of the activity

The licence authorises Barberton Mines (Pty) Ltd: Fairview Mine to undertake section 21 (a, b, e, f, g, & J) water uses of the National Water Act, 1998 (Act 36 of 1998) to reclaim Mine tailings and to continue mining to the current life of Mine plan. The project will allow for the consolidation of all tailings into a single, newly constructed tailings storage facility (TSF).

### APPENDIX I

# **CONDITIONS FOR ALL WATER USES**

- This licence is subject to all applicable provisions of the National Water Act, 1998 (Act 36 of 1998).
- 2. The responsibility for complying with the provisions of the licence is vested in the Licensee and not any other person or body.
- 3. The Licensee must immediately inform the CEO of any change of name, address, premises and/or legal status.
- 4. If the property in respect of which this licence is issued is subdivided or consolidated, the Licensee must provide full details of all changes in respect of the properties to the CEO within sixty (60) days of the said change taking place.
- 5. If a water user association is established in the area to manage the resource, membership of the Licensee to this association is compulsory and rules, regulations and water management stipulations of the association must be adhered to.
- The Licensee shall be responsible for any water use charges or levies, which may be imposed from time to time by the CEO in terms of the Department's Raw Water Pricing Strategy.
- 7. While effect must be given to the reserve as determined in terms of the Act, where a desktop determination of the reserve has been used in issuance of a licence, when a comprehensive determination of the reserve has finally been made it shall be given effect to.
- 8. The licence shall not be construed as exempting the Licensee from compliance with the provisions of any other applicable Act, Ordinance, Regulation or By-law.
- 9. The licence and amendment of this licence are also subject to all the applicable procedural requirements and other applicable provisions of the Act, as amended from time to time.
- 10. The Licensee shall conduct an annual internal audit on compliance with the conditions of licence. A report on the audit shall be submitted to the CEO within one month of the finalisation of the audit.
- 11. The Licensee shall appoint an independent external auditor to conduct an annual audit on compliance with the conditions of this licence. The first audit must be conducted within 6 (six) months after the issuance of this licence. A report on the audit shall be submitted to the CEO within one month of finalisation of the report.
- 12. Flow metering, recording and integrating devices shall be maintained in a sound state of repair and calibrated by a competent person at intervals of not more than two years. Calibration certificates shall be available for inspection by the CEO or his/her representative upon request.
- 13. Any incident that causes or may cause water pollution shall be reported to the CEO or his/her designated representative within 24 hours.
- 14. Licensee shall use water efficiently to minimise total water intake, avoid usage of water where possible, implement "good" housekeeping and operating practices, and maximise the reuse /recycle of contaminated water.

15. If the Licensee is not the end user/beneficiary of the water use related infrastructure and will not be responsible for long term maintenance and management of the infrastructure, the Licensee shall provide a programme for hand over to the successor-in-title including a brief management/maintenance plan and the agreement for infrastructure along with allocation of responsibilities, within three (3) months of the date of issuing of this licence.

# **APPENDIX II**

# Section 21 (a) of the Act: Taking water from a water resource

1. This licence authorizes Barberton mines (Pty) Ltd: Fairview mine for the abstraction of water quantity indicated in Table 2.

Table 2: Quantity of water to be abstracted

| Purpose   | Properties                                    | Volume of water to be abstracted  | Co-ordinates        |               |
|---|---|---|---------------------|---------------|
| Abstraction from the borehole to supply mine's village, mine's plant, offices, clinic, workshops, stores, hostels, change houses and Barberton Gold (Pty) Ltd with domestic water.                  | Remaining<br>extent of<br>Fairview<br>708 JU. | 142 350 m³/a  | 25°43'35.6" S       | 31°03'56.3" E |
| Abstraction from Suid<br>Kaap River to supply<br>mine's village, mine's<br>plant, offices, clinic,<br>workshops, stores,<br>hostels, change houses<br>and Verulam community<br>with domestic water. | Remaining<br>extent of<br>Hayward<br>310 JU.  | 521 500 m <sup>3</sup> /a   | 25°42'01.0" S       | 31°04'26,2″E  |
| Abstraction from Hyslops Creek to supply mine's village, mine's plant, offices, clinic, workshops, stores, hostels, change houses with domestic water.  | Greenstorie<br>917 JU Ptn<br>82               | 175 000 m³/a. 74 420 m³/a of this volume is the ELU, water- right grant No.133/09 | 25°44'55.8" S       | 31°04'36,5" E |
| Abstraction of groundwater from a borehole for remediation  | Remaining<br>extent of<br>Fairview            | 19 345 m³/a   | 25°44'07.3" \$      | 31°04'52.4" E |
| purpose i.e. interception of poliution plume from   | 708 JU  | 19 345 m³/a   | 25° 43' 58.86"<br>S | 31°09'22.2" E |
| the old rousting plant footprint.   |   | 19 345 m³/a   | 25°44'01.6" S       | 31°04'49.1" E |
| Abstraction of groundwater using  | Bramber<br>South 349                          | 10 164 m³/a   | 25°43'06.0" S       | 31°03'35.5'E  |
| scavenger boreholes along the Loubschers  | s JU.<br>s<br>n<br>tion<br>om                 | 3 390 m³/a  | 25°43'16.1" S       | 31°03'47.3" E |
| Creek for remediation purpose i.e. interception   |   | 44 664 m³/a   | 25°43'08.8 S        | 31°03'34.5" E |
| of pollution plume from the Loubschers. The   |   | 72 792 m³/a   | 25°43'08.8" S       | 31°03'34.5" E |
| abstracted water is used  |   | 14 000 m³/a   | 25°43'11.8" S       | 31°03'41.3" E |

| Purpose  | Properties   | Volume of water to be abstracted | Co-ordinates   |               |
|--|--|----------------------------------|----------------|---------------|
| in the BTRP.   |  | 3 000 m³/a                       | 25°43'08.9" \$ | 31°03'37.2" E |
| Abstraction of groundwater from a borehole to irrigate 2 ha of the local community vegetable garden (project). | Remaining<br>extent of<br>Fairview<br>708 JU   | 2 047 m³/a                       | 25°44'23.9" S  | 31°03'55.8'E  |
| Taking of water found underground at Fairview mine for Tailings reworking.                                     | Section A<br>Kaap Block<br>Lot 123.  | 779 202 m³/a                     | 25°43'55,8"S   | 31°06'01.7"E  |
| Taking of water found underground at New Consort mine for Tailings reworking at Fairview Mine.                 | Lot 191, Lot<br>192, Lot 103<br>and<br>Remaining<br>Extent of<br>the Farm<br>Segala 306<br>JU. | 657 000 m <sup>3</sup> /a        | 25°39'13.0" S  | 31°04'01.3" E |

- 1.1. The quantity of water authorized to be taken in terms of this licence may not be exceeded without prior authorization by the Minister.
- 1.2. This licence does not imply any guarantee that the said quantities and qualities of water will be available at present or at any time in the future.
- 1.3. The above mentioned volume may be reduced when the licence is reviewed.
- 1.4. The quantity of water abstracted should be measured on a daily basis and the total should also be measured every last day of the month and the result should be submitted to the CEO.
- 1.5. The Licensee shall continually investigate new and emerging technologies and put into practice water efficient devices or apply technique for the efficient use of water containing waste, in an endeavour to conserve water at all times.
- 1.6. No water taken may be pumped, stored, diverted, or alienated for purpose other than intended in this licence, without written approval by the Minister or his/her delegated nominee.
- 1.7. The Licensee shall install and monitor appropriate water measuring devices to measure the amount of water abstracted, received and/or consumed, as applicable to the infrastructure.
- 1.8. Notices prohibiting unauthorized persons from entering certain areas, as well as internationally acceptable signs indicating the risks involved in case of an unauthorized entry must be displayed along the boundary fence of these areas.
- 1.9. The Licensee shall ensure that all measuring devices are properly maintained and in good working order and must be easily accessible. This shall include a programme of

checking, calibration, and/or renewal of measuring devices.

- 1.10. The Department accepts no liability for any damage, loss or inconvenience, of whatever nature, suffered as a result of:
  - 1.10.1. Shortage of water;
  - 1.10.2. Inundations or flood;
  - 1.10.3. Siltation of the resource; and
  - 1.10.4. Required reserve releases.
- 1.11. The Licensee shall establish a programme of formal Information Management System, which maintains a database on water supply, distribution and delivery infrastructure.
- 1.12. The Licensee shall establish and implement a continual process of raising awareness amongst itself, its workers and stakeholders for the need to for Water Conservation and Water Demand Management.

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### APPENDIX III

# Section 21(b) of the Act: Storing of water

# Storage of Water

1.1 The licensee is authorised to store a maximum quantity of water as indicated in Table 3.

Table 3: Quantity of water to be stored

| Activity                                   | Property<br>description | Volume of water to be stored | Capacity<br>(m³) | Co-ordinates               |
|--|-------------------------|------------------------------|------------------|----------------------------|
| Storage of portable water into underground | Section A<br>Kaap Block | 624 150 m³/a                 | 1.2 Million      | 25 <sup>0</sup> 43'57.0" S |
| reservoir.                                 | Lot 123                 |                              |                  | 31º06'03.1" E              |

- 1.2 The licensee must obtain any proprietary rights or servitudes at his own cost.
- 1.3 The Licensee is not exempted from compliance with any applicable Dam Safety Regulations.
- 1.4 No additional water storage facilities can be constructed on the property without prior written consent of the Minister or responsible authority.

# 2. Monitoring Requirements

- 4.1 The licensee is not indemnified from any detrimental effect that the underground reservoir may have on other properties. The Department does not accept any responsibility or liability for any damages or losses that may be suffered by any other party as a result of the construction and utilisation of the underground reservoir.
- 5.1 The licensee shall establish a monitoring programme and the date and time of monitoring in respect of each sample taken shall be recorded together with the results of the analysis as well as other significant information (pollution incident, etc.).
- 6.1 The quantity of water stored shall be recorded as at the last day of each month.

# 3. Dam Safety Requirements

- 3.1 The construction, operation, and maintenance of all dam facilities classified as a dam with a safety risk, must be carried out under supervision of a Professional Civil Engineer, registered under the Engineering Profession of South Africa Act, 1990 (Act 114 of 1990).
- 3.2 All storage facilities (for water not containing waste) with a safety risk will comply to the following control measures:
- 3.3 The licensee shall supply any information, drawings, specifications, design assumptions, calculations, documents and test results when requested by the CEO.
- 3.4 An approved professional person must be appointed to carry out a dam safety evaluation annually and must:
  - 3.4.1 Consider whether the safety norms pertaining to the design, construction, monitoring, operation, performance and maintenance of the dam satisfy acceptable dam engineering practices.

3.4.2 Compile a report on the matters contemplated above according to the prescribed requirements and submit the signed and dated report to the owner of the dam within the prescribed period.

3.5 The licensee is not exempted from compliance with the provisions of the Regulations published under Government Notice R1560 of 25 July 1986, read with Chapter 12 of the Act.

# 4. Construction of Dam(s)

- 4.1 Construction of the dam(s) may not commence before authorisation in terms of the Environment Conservation Act, 1989 (Act 73 of 1989) is issued.
- 4.2 The Government reserves the right to construct storage works at any time in any stream and to store all surplus water reaching the dam(s) and to control the allocation of such water.
- 4.3 Construction of the dam(s) may not commence unless the required authorisation to build has been issued by the Dam Safety Office of this Department.

## APPENDIX IV

Section 21(e) of the Act: Engaging in a Controlled Activity; Irrigation of any Land with Waste or Water Containing Waste

# 1. QUANTITY OF WATER CONTAINING WASTE FOR IRRIGATION

1.1 This licence authorises the disposal to irrigated land with a maximum quantity of water per annum as indicated in Table 4.

Table 4: Water use activity

| Activity  | Property description                         | Volume of water containing waste to be irrigated | Co-ordinates                |
|---|--|--|-----------------------------|
| Irrigation Rehab: Irrigation to leach out the Arsenic Roasting plant footprint. | Remaining<br>extent of<br>Fairview<br>708 JU | 31 390 m³/a                                      | 25°43'57.0" S 31°06'03.1" E |

1.2 The quantity of wastewater authorised to be irrigated in terms of this licence may not be exceeded without prior authorisation by the Minister.

# 2. CROP TYPE AND AREA IRRIGATED

2.1 This licence authorises to irrigate a total surface area of 2 Ha of artificial pasture, trees and shrub on the properties according to agreement.

# 3. QUALITY OF WATER CONTAINING WASTE

3.1 The quality of the water containing waste irrigated may not exceed the following non-exceedance values or range as indicated in table 5.

Table 5: Water quality limits to be irrigated

| VARIABLE                              | LIMIT      |
|---------------------------------------|------------|
| pH                                    | 6.5 - 8.4  |
| Electrical Conductivity               | 200 mS/m   |
| Ortho-Phosphate (as PO <sub>4</sub> ) | 0.125 mg/l |
| Sulphate (as SO <sub>4</sub> )        | 250 mg/l   |
| Arsenic (as As)                       | 0.02 mg/l  |
| Cyanide (as Cn)                       | 0.004 mg/l |
| Chloride (as CI)                      | 30 mg/l    |
| Flouride (as F)                       | 0.9 mg/l   |
| Iron (as Fe)                          | 0.1 mg/L   |
| Magnesium (as Mg)                     | 58 mg/l    |
| Total Dissolved Solids (as TDS)       | 688 mg/l   |

3.2 Each sample shall be analysed according to condition 5 of Appendix VI for the variables indicated in table 5.

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# 4. MONITORING

- 4.1 The quantity of water containing waste irrigated shall be metered and recorded daily.
- 4.2 The quality of waste or water containing waste shall be monitored monthly at the outlet of the irrigation point.
- 4.3 Monitoring for the quantity of the water containing waste for irrigation shall be done at the point where the effluent is piped into the irrigation dam.
- 4.4 Flow metering, recording and integrating devices shall be maintained in a sound state of repair and calibrated by a competent person at intervals of not more than two years. Calibration certificates shall be available for inspection by the CEO or his representative upon request.
- 4.5 The monitoring point/s shall not be changed without prior notification to and written approval by the CEO.
- 4.6 A monitoring program to determine compliance with the ground water quality reserve on the property/properties must be designed in consultation with the affected parties.

### 5. REPORTING

5.1 The information required in terms of condition 3 shall be submitted quarterly to the CEO, under reference 27/2/2/X23F/071, within one month of the close of the period concerned.

# 6. GENERAL IRRIGATION PRACTICES

- 6.1 Irrigation shall be practised in accordance with the guidelines prescribed in the document titled "Guide: Permissible Utilisation and Disposal of Treated Sewage Effluent", issued by the former Department of Health under reference 11/2/5/3 and dated 30 May 1978, or in accordance with any relevant regulations promulgated under section 26 of the Act.
- 6.2 Irrigation with waste shall be practiced in a systematic manner and precautions shall be taken so as to prevent
  - 6.2.1 water logging and pooling of waste in any location;
  - 6.2.2 pollution of underground water or surface water due to seepage or otherwise;
  - 6.2.3 fly breeding, public health hazard, odour or secondary pollution;
  - 6.2.4 runoff from the irrigation area because of wet weather or any other conditions whatsoever; and
  - 6.2.5 The site of the irrigation area shall be adequately fenced to prevent the entry of animals and unauthorised persons.
- 6.3 Notices manufactured of durable weatherproof material prohibiting unauthorised entry and warning against the use of water containing waste for drinking and washing purposes shall be displayed at prominent places along the fence and at entrance gates. Such notices shall be worded in the official languages applicable in the area.

# 7. PIPELINES

4.1 The pipelines used for the conveyance of waste shall be painted in a conspicuous colour or manufactured of a coloured material distinctly different from the colour of the pipelines in which drinking water is flowing to avoid the possibility of any cross-connections of the different pipelines.

7.2 All stop-valves and taps on the pipelines conveying the effluent shall be of a type that can be opened and closed by means of a loose wrench. This wrench shall be in the safekeeping of a responsible member of the staff to prevent unauthorised use thereof.

7.3 Notices manufactured of a durable weatherproof material warning against the use of water containing waste for drinking and washing purposes shall be displayed at prominent places where the waste is being reused and at all taps. Such notices shall be worded in the official languages applicable in the area.

### APPENDIX V

Section 21(f) of the Act: Discharging waste or water containing waste into a water resource

# 1. QUANTITY OF WATER CONTAINING WASTE

1.2.1 This licence authorises the discharge of water containing waste to the Olifantskloof Creek of a maximum quantity of water per annum as indicated in Table 6.

Table 6: Quantity of water to be discharged

| Activity   | Property<br>Description                      | Volume of water to be discharged | Co-ordinates               |                            |
|--|--|----------------------------------|----------------------------|----------------------------|
| Discharge of excess underground water for continuation of mining into Olifantskloof Creek.   | Remaining<br>extent of<br>Fairview 708<br>JU | 262 435 m <sup>3</sup> /a        | 25 <sup>0</sup> 43'55.8" S | 31 <sup>0</sup> 06'01.7" E |
| Discharge of excess underground water from process water tank and overflow from treatment plant backwash into Olifantskloof Creek. | Remaining<br>extent of<br>Fairview 708<br>JU | 115 304 m <sup>3</sup> /a        | 25 <sup>0</sup> 43'56.8" S | 31 <sup>0</sup> 04'23.6" E |

# 2. QUALITY OF WATER CONTAINING WASTE

2.1 The quality of water containing waste discharged into the Olifantskloof Creek may not exceed the non-exceedance values or range in table 7:

Table 7: Water quality limits to be discharge into the Olifantskloof Creek

| VARIABLE                              | LIMIT      |
|---------------------------------------|------------|
| рН                                    | 6.5 - 8.4  |
| Electrical Conductivity               | 200 mS/m   |
| Ortho-Phosphate (as PO <sub>4</sub> ) | 0.125 mg/l |
| Sulphate (as SO <sub>4</sub> )        | 250 mg/l   |
| Arsenic (as As)                       | 0.02 mg/l  |
| Cyanide (as Cn)                       | 0.004 mg/l |
| Chloride (as Cl)                      | 30 mg/l    |
| Flouride (as F)                       | 0.9 mg/l   |
| Iron (as Fe)                          | 0.1 mg/L   |
| Magnesium (as Mg)                     | 58 mg/l    |
| Total Dissolved Solids (as TDS)       | 688 mg/l   |

### 3. MONITORING

- 3.1 Quantity
- 3.1.1 The quantity of waste discharged into the Olifantskloof Creek shall be metered and recorded daily.
- 3.1.2 Monitoring for the quantity of waste shall be done at the point where the waste is discharged into the Olifantskloof Creek
- 3.1.3 Flow metering, recording and integrating devices shall be maintained in a sound state of repair and calibrated by a competent person at intervals of not more than two years. Calibration certificates shall be available for inspection by the
- 3.2 Quality of waste
- 3.2.1 The quality of the waste shall be monitored by taking grab samples every week at the monitoring points described in condition 4.1.2 of Appendix V. Each sample shall be analysed according to condition 5 of Appendix VI for the following variables as indicated in table 8:

Table 8: Water quality parameters relevant for sampling

| VARIABLE                        | UNIT        |
|---------------------------------|-------------|
| рН                              | in pH units |
| Electrical Conductivity         | in mS/m     |
| Sulphate (as SO <sub>4</sub> )  | in mg/l     |
| Arsenic (as As)                 | in mg/l     |
| Cyanide (as Cn)                 | in mg/l     |
| Chloride (as Cl)                | in mg/l     |
| Flouride (as F)                 | in mg/l     |
| Iron (as Fe)                    | in mg/l     |
| Magnesium (as Mg)               | in mg/l     |
| Total Dissolved Solids (as TDS) | in mg/l     |

and/or any other variable as may be required from time to time by the CEO.

3.3 The date, time and monitoring point in respect of each sample taken shall be recorded together with the results of the analysis.

# 4. MONITORING POINTS

- 4.1 Monitoring for quality and flow shall only be carried out at the monitoring points listed below:
- 4.1.1 Monitoring points for flow:
- 4.1.1.1 at the waste discharge point of the workshop dam at the geographic position S 25° 43' 56.8" E 31° 04' 23.6" and the waste discharge point of the 11 Edit at the geographic position S 25° 43' 55.8" E 31° 06' 01.7".

4.1.2.1 at the outlet point of the workshop dam at the geographic position S 25° 43′ 56.8″ E 31° 04′ 23.6″ and 11 Edit at the geographic position S 25° 43′ 55.8″ E 31° 06′ 01.7″ where the waste is discharged into the Olifantskloof Creek.

- 4.1.2.2 in the Olifantskloof Creek at upstream and downstream of the discharge points.

  Monitoring points must be identified in consultation with the CEO.
- 4.2 The monitoring points shall not be changed without prior notification to and written approval by the CEO.

### 5. REPORTING

5.1 The information required in terms of condition 3 of Appendix V shall be submitted quarterly to the CEO, under reference 27/2/2/X23F/071, within one month of the close of the period concerned.

# 6. STORMWATER DISPOSAL

6.1 Storm water leaving the mining activity premises shall in no way be contaminated by any substance, whether such substance is a solid, liquid, vapour or gas or a combination thereof which is produced, used, stored, dumped or spilled on the premises.

# APPENDIX VI

Section 21 (g) of the Act: Disposing of waste in a manner which may detrimentally impact on a water resource

# 1. DISPOSAL OF WASTE OR WATER CONTAINING WASTE

1.1 The Licensee is authorised to dispose of a maximum quantity of waste or water containing waste into the waste management facilities on the properties described in Table 9.

**Table 9: Waste Management Facilities** 

| Purpose  | Properties                                    | Quantity of            | Co-ordinates     |                                    |
|--|---|------------------------|------------------|------------------------------------|
|  |   | waste or<br>wastewater |                  |                                    |
| Disposal of rainfall runoff water; overflow from potable treatment backwash into workshop dam.   | Remaining<br>extent of<br>Fairview<br>708 JU. | 153 300 m³/a           | 25°43'55.3" S    | 31°03'21.8" E                      |
| Disposal of tailings into Bramber Storage Tailings Facility.                                     | Remaining<br>extent of<br>Fairview<br>708 JU. | 21 900 tons/a          | 25° 43' 35.6" S  | 31°03′ 56.3" E                     |
| Disposal of tailings at Bramber Extension Tailings facility.                                     | Remaining<br>extent of<br>Fairview<br>708 JU. | 156 950 tons/a         | 25° 43' 40.2" \$ | 31°04' 02.5" E                     |
| Disposal of supernatant water from Bramber TSF to the Bramber return dam.                        | extent of<br>Fairview                         | 18 250 m³/a            | 25° 43' 40.2" S  | 31°04' 02.5" E                     |
| Disposal of supernatant water BTRP return water dam into the Bramber extension return water dam. | Remaining<br>extent of<br>Fairview<br>708 JU. | 87 235 m³/a            | 25° 43' 34.1" S  | 31°03' 58.1" E                     |
| Emergency dam to dispose supernatant water from the remining of Bramber TSF.                     | Remaining<br>extent of<br>Fairview<br>708 JU. | 17 800 m <sup>3</sup>  | 25° 43' 48.8" S  | 31°03' 45.6" E                     |
| Disposal of tailings into new Bramber Tailings Storage Facility.                                 | Bramber<br>south 349<br>JU                    | 1 241 000<br>tons/a    | 25°43'30.8" S    | 31°03'42,9" E<br>ati Usuthu Catchn |

| Purpose   | Properties            | Quantity of waste or wastewater | Co-ordinates    |                    |
|---|-----------------------|---------------------------------|-----------------|--------------------|
| Disposal of supernatant water from new Bramber Tailings Storage Facility into the new Bramber return water dam.                       |                       | 1 204 500 m³/a                  | 25°43'55.8" S   | 31°06'01.7" E      |
| Disposal of water found underground from New Consort mine shafts into workshop dams to be reused in the plants (BTRP and Biox plant). |                       | 657 000 m <sup>3</sup> /a       | 25°43'34.1" S   | 31°03'58.1" E      |
| Disposal of water found underground from Fairview Mine (surplus water after the mill tanks) to the workshop dams.                     | extent of<br>Fairview | 300 000 m³/a                    | 25° 43' 55.3" S | 31° 03' 21.8"<br>E |
| Disposal of treated sewage waste water.   | Worrall 352<br>JU     | 70 304 m³/a                     | 25°43'32.4" S   | 31°04'08.3" E      |

1.2 The quantity of waste or water containing waste authorised to be disposed of in terms of this licence may not be exceeded without authorisation from CEO as stated in section 50 of the Act.

# 2. CONSTRUCTION, OPERATION AND MAINTANANCE

- 2.1 All facilities constructed to manage clean and dirty storm water, seepage and or process water must be constructed as per the proposed designs reflected in the reports.
- 2.2 The process dam systems must be operated under appropriate supervision and maintained in such a manner as to ensure that:
- 2.2.1 Wave action created by wind does not erode the inner sides of the pond walls;
- 2.2.2 A minimum freeboard of 0.8 meters be maintained for the mine residue facility return water dam above the expected maximum water level which is based on the average monthly rainfall figure for the catchment area concerned, plus the maximum precipitation to be expected over a period of 24 hours with a frequency of once in every 50 years, less the gross mean evaporation for the area; and
- 2.2.3 If, in the opinion of the CEO, the return water dams fail to meet the requirements of this licence or otherwise constitutes a water pollution hazard, the Licensee must take such appropriate steps as may be deemed necessary by the CEO.
- 2.2.4 Contour walls or furrows must be provided around the waste management facility system to prevent storm-water ingress or erosion of the waste management facilities and any wastewater from entering any river or stream.

- 2.3 The construction, operation and maintenance of all dam facilities classified, and those not classified, as a dam/(s) with a safety risk, must be carried out under supervision of a Professional Civil Engineer, registered under the Engineering Profession of South Africa Act, 1990 (Act 114 of 1990).
- 2.4 The relevant components of the water management system, of which the dam facilities are an integral part, must be designed to retain the run-off for a 24-hour duration storm event with a 50-year recurrence interval maintaining a minimum freeboard of 0.8 metres. The capacity shall be over and above the operating capacity.
- 2.5 The Licensee must implement the following erosion protection measures:
- 2.5.1 The slopes of the Return Water Dam and Tailings Storage Facility must be vegetated as soon as practically possible with appropriate seed mix.
- 2.5.2 All disturbed areas must be vegetated as soon as practically possible with appropriate vegetation. Areas that fail to establish vegetation cover must be re-seeded immediately.
- 2.5.3 Where disturbed areas cannot be vegetated during the life operations of the dam, erosion control measures must be implemented on all slopes exceeding 2% and engineered control measures on all slopes exceeding 15%.
- 2.5.4 Alien vegetation must not be allowed to colonise the area and all new alien vegetation recruitment must be eradicated or controlled, using standard methods approved by the Department.
- 2.5.5 Loose sack gabions (biodegradable sacks filled with soil and Cynodon dactylon seed) must be placed within and/or around eroded areas.
- 2.5.6 The erosion zone must be backfilled and seeded with appropriate seed mix, which will predominantly consist of creeping grasses.

### 3. QUALITY OF WASTE OR WATER CONTAINING WASTE TO BE DISPOSED.

3.1 The quality of waste or water containing waste to be disposed into Tailing Storage Facility and Return Water Dams may not exceed limits specified in Table 10.

Table 10: Quality of waste or water containing waste to be disposed

| VARIABLE                        | LIMITS      |
|---------------------------------|-------------|
| pH                              | 6.5 – 8.4   |
| Electrical Conductivity         | 1 060 mS/m  |
| Sulphate (as SO <sub>4</sub> )  | 8 434 mg/l  |
| Arsenic (as As)                 | 0.79 mg/l   |
| Chloride (as CI)                | 754 mg/l    |
| Flouride (as F)                 | 14 mg/l     |
| Iron (as Fe)                    | 7 mg/l      |
| Sodium (as Na)                  | 1 183 mg/l  |
| Magnesium (as Mg)               | 2 007 mg/l  |
| Total Dissolved Solids (as TDS) | 14 404 mg/l |

### 4. MONITORING

# 4.1 Surface water monitoring

4.1.1 The Licensee shall monitor surface water on monthly basis at the monitoring points described in Table 11 by taking grab samples.

Table 11: Surface water monitoring points for Fairview Mine

| Monitoring<br>Point I.D | Description   | Co-ordinates                  |                             |
|-------------------------|---|-------------------------------|-----------------------------|
| FWSP 1                  | Fairview adit outflow.  | 25 <sup>0</sup> 43' 54.48" \$ | 31º06'0.36" E               |
| FWSP 3                  | Olifantskloof Creek after old tailings dumps.                       | 25 <sup>0</sup> 43 '57.6" S   | 31 <sup>0</sup> 05'47.16" E |
| FWSP 4                  | Olifantskloof Bridge at security gate.                              | 25 <sup>0</sup> 43 '59,22" S  | 31 <sup>0</sup> 04'20.34" E |
| FWSP 8                  | Caledonian bridge (Suid-kaap<br>river downstream from<br>Fairview). | 25° 42' 47.4" S               | 31° 03′ 30.5" E             |
| FWSP 9                  | Bramber return water dam.   | 25° 43′ 46.32″ S              | 31° 03′ 50.4″ E             |
| FWSP 10                 | Loubshers creek Bridge<br>Barberton to Kaapmuiden.                  | 25 <sup>0</sup> 43' 1.62" S   | 31°03'32.58" E              |
| FWSP 11                 | Hyslops creek Bridge Fairview Bton (Hydro 14 streams).              | 25 <sup>0</sup> 43' 26.4" S   | 31 <sup>0</sup> 03′55,6" E  |
| FWSP 12                 | Olifants/ Hyslops after confluence. Bridge Bton/ Kaapmuiden.        | 25 <sup>0</sup> 43' 28.86" S  | 31 <sup>0</sup> 03'20.94" E |
| FWSP 13                 | Workshop dam.   | 25° 43' 55.3" S               | 31°03'21.8" E               |
| FWSP 14                 | Olifantskloof downstream Tailings dams.                             | 25° 43' 56.7" S               | 31° 03′ 55.68″ E            |
| FWSP 15                 | Bramber extension return water dam.                                 | 25 <sup>0</sup> 43' 34.1" S   | 31 <sup>0</sup> 03'58.1" E  |
| FWSP 16                 | Upstream Fairview.  | 25° 43' 03.2" S               | 31° 02′ 30.7″ E             |
| FWSP 17                 | Sewage from new plant.  | 25° 43' 30.8" S               | 31°03'42,9" E               |
| FWSP 18                 | BTRP return water dam.  | 25° 43' 47.1" S               | 31° 03′ 51.6" E             |
| FWSP 19                 | BTRP Tailings Storage Facility.                                     | 25°43'30.8" \$                | 31°03'42,9" E               |

# 4.2 Groundwater Monitoring

4.2.1 The Licensee shall monitor groundwater quality on a quarterly basis at the monitoring points described in Table 12.

Table 12: Groundwater monitoring points for Fairview Mine

| Monitoring Point I.D | Clinic Parking scavenger borehole below plant. |                | :              |
|----------------------|--|----------------|----------------|
| B2                   | , ,  | 25° 44'0.9" S  | 31°4'29.46" E  |
| B3                   | Scrap yard scavenger borehole below plant.     | 25° 44'4.32" S | 31°04'31.44" E |

| Monitoring<br>Point I.D | Description   | Co-ordinates                |                             |
|-------------------------|---|-----------------------------|-----------------------------|
| B 4                     | Scavenger boreholes below stores.   | 25° 44'00.6" S              | 31°04'23.5" E               |
| B6                      | Olifantskloof scavenger borehole at security gate.                                      | 25° 43'58.86" S             | 31°04'21.9" E               |
| B9                      | Bramber tailings dam.   | 25 <sup>0</sup> 43'53.16" S | 31 <sup>0</sup> 04'12.76" E |
| B10                     | Downstream Bramber tailings<br>Olifantskloof.   | 25º43'55.5" S               | 31°04'7.56" E               |
| B14                     | South East of Return Water Dam.   | 25 <sup>0</sup> 43'51.18" S | 31º03'50.46" E              |
| B17                     | Downstream Bramber Return Water Dam.  | 25 <sup>0</sup> 43'48.6" S  | 31 <sup>0</sup> 03'45.36" E |
| B18                     | Downstream Bramber tailings dump.   | 25 <sup>0</sup> 43'47.1" S  | 31 <sup>0</sup> 03'51.6" E  |
| B19                     | Loubshers Creek below Bramber & moon dump.  | 25°43'31.08" S              | 31 <sup>0</sup> 04'6.36" E  |
| B22                     | Next to Fairview Kaapmuiden road<br>Bramber East & moon dump.                           | 25 <sup>0</sup> 43'34.32" S | 31°04'11.76" E              |
| B23                     | Next to Fairview Kaapmuiden road Bramber east & moon dump.                              | 25 <sup>0</sup> 43'35.16" S | 31 <sup>0</sup> 04'12.66" E |
| B24                     | Next to Fairview Kaapmuiden road Bramber East & moon dump.                              | 25°43'42.96" S              | 31 <sup>0</sup> 04'15.3" E  |
| B25                     | North East Bramber Ext TSF.   | 25 <sup>0</sup> 43'30.1" S  | 31 <sup>0</sup> 04'00.1" E  |
| B26                     | Next to Fairview Kaapmuiden road.   | 25 <sup>0</sup> 43'17.5" S  | 31 <sup>0</sup> 03'55.9" E  |
| B27                     | Next to Fairview Kaapmuiden road<br>300 metres from Barberton<br>Kaapmuiden T Junction. | 25 <sup>0</sup> 43'08.8" S  | 31 <sup>0</sup> 03'48.6" E  |
| B28                     | Barberton Kaapmuiden road next to loubshers Creek.                                      | 25°43'06.9" S               | 31 <sup>0</sup> 03'31.5" E  |
| B29                     | Barberton Kaapmuiden road between to Loubshers Creek and Olifants Creek.                | 25 <sup>0</sup> 43'21.8" S  | 31 <sup>0</sup> 03'28.6" E  |
| B30                     | Loubshers Creek below Bramber & moon dump.  | 25º43'29.41" S              | 31 <sup>0</sup> 03'18.7" E  |
| B31                     | Bramber farm adjacent to R 38.  | 25° 43' 14.1" S             | 31° 03' 12.5" E             |
| B 32                    | Bramber farm adjacent to R 38 scavenger borehole.                                       | 25° 43' 0.39" S             | 31° 03' 30.6" E             |
| B 33                    | Bramber farm adjacent to R 38.  | 25° 42'56.07" S             | 31° 03′ 50.7″ E             |
| B 34                    | Barberton scavenger borehole.   | 25° 43' 15.6" S             | 31° 03′ 50.7″ E             |
|                         |   | Inkor                       | nati Usuthu Catchr          |

| Monitoring Point I.D | Description                   | Co-ordinates   |                 |
|----------------------|-------------------------------|----------------|-----------------|
| B 35                 | Barberton scavenger borehole. | 25° 43'16.1" S | 31° 03' 47.3" E |
| B 37                 | Barberton scavenger borehole. | 25° 43'08.8 S  | 31° 03'34.5" E  |
| B 38                 | Barberton scavenger borehole. | 25° 43'08.8" S | 31° 03'34.5" E  |
| B 39                 | Barberton scavenger borehole. | 25° 43'08.9" S | 31° 03'37.2" E  |
| B 40                 | Barberton scavenger borehole. | 25° 43'11.8" S | 31° 03'41.3" E  |
| B 41                 | Barberton scavenger borehole. | 25° 43'13.7" S | 31° 03'42.8" E  |
| B 42                 | Barberton scavenger borehole. | 25° 43'19.7" S | 31° 03'30.9" E  |

- 4.2.2 The Licensee shall in consultation with the CEO establish additional groundwater monitoring points deemed necessary to monitor impacts of new Bramber Tailings Storage Facilities on groundwater within 6 months of the issuance of the licence.
- 4.2.3 Impact of scavenger boreholes on the regional groundwater levels should be studied, modelled and submitted to the CEO for recommendation within a year of licence issuance.
- 4.2.4 Pollution migration model should be updated yearly with enough data coming in from the quarterly monitoring program.
- 4.2.5 Monitoring boreholes must be clearly marked and numbered, and must be equipped with lockable caps. The Department reserves the right to sample monitoring boreholes at any time and to analyse these samples, or to have samples taken and analysed.
- 4.2.6 The monitoring programme must include rainfall and tailings deposition on a daily basis and groundwater level monitoring on a monthly basis.
- 4.2.7 The frequency of sampling shall not be changed prior to notification and written approval by the CEO.
- 4.2.8 The Licensee shall use acknowledged methods for borehole sampling and the date, time, sampler and borehole number must be indicated for each sample.
- 4.2.9 The Licensee shall make provision for the sampling of any additional monitoring requirements that might be required from time to time as specified by the CEO.
- 4.2.10 No groundwater abstraction may take place within 100m of river, spring or wetland. This distance may be increased by CEO if deemed necessary.
- 4.2.11 An agreement for sewage sludge disposal between the mine and the owner of the licensed wastewater treatment works must be submitted to the CEO within 30 days of the licence issuance.
- 4.3 The following water quality variables (constituents) must be included in both groundwater the surface water monitoring programme:

Table 13: Water quality variables to monitored

| VARIABLE                        | UNIT        |
|---------------------------------|-------------|
| pH                              | in pH units |
| Electrical Conductivity         | in mS/m     |
| Total Dissolved Solids          | in mg/l     |
| Alkalinity                      | in mg/l     |
| Ammonia (as N)                  | in mg/l     |
| Nitrate (as N)                  | in mg/l     |
| Nitrite (as N)                  | in mg/l     |
| Chloride (as Cl)                | in mg/l     |
| Sulphate (as SO <sub>4</sub> )  | in mg/l     |
| Sodium (as Na)                  | in mg/l     |
| Calcium (as Ca)                 | in mg/l     |
| Magnesium (as Mg)               | in mg/l     |
| Aluminium (as Al)               | in mg/l     |
| Arsenic (as As)                 | in mg/l     |
| Cyanide (as Cn)                 | in mg/l     |
| Iron (as Fe)                    | in mg/l     |
| Manganese (as Mn)               | in mg/l     |
| Total Dissolved Solids (as TDS) | in mg/l     |

- 4.4 The registered professional Aquatic Scientist must establish a monitoring programme for the following indices: Invertebrate Habitat Assessment System (IHAS) and the latest SASS (South African Scoring System). Sampling must be done once during summer season and once during the winter season, annually, to reflect the status of the river upstream and downstream of the mining activities.
- 4.5 Water quality testing to be performed on the new Bramber return water dam, new Bramber Storage Facility on a monthly basis in order to determine the risks to the receiving environment. The data gathered in the investigation must be reported annually to the CEO. If any concentrations levels as specified in table 10 are exceeded. The licensee must institute an investigation to determine the cause of the poor water quality.
- 4.6 The date, time and monitoring point in respect of each sample taken shall be recorded together with the results of the analysis.

### METHODS OF ANALYSIS

- 5.1 Analyses for water quality samples shall be carried out in accordance with methods prescribed by and obtainable from the South African Bureau of Standards, in terms of the Standards Act. Act 30 of 1982.
- 5.2 The methods of analysis shall not be changed without prior notification to and written approval by the Minister or delegated nominee.

### 6. INCIDENT MONITORING

6.1 In the event that emergency incident results in pollution of water resource, the Licensee shall report the incident to the CEO within 24 hours, monitor the water quality and the incident report shall be submitted to the CEO within fourteen (14) days.

### 7. REPORTING

- 7.1 The Licensee shall update the water balance annually and calculate the loads of waste emanating from the activities. The Licensee shall determine the contribution of their activities to the mass balance for the water resource and must furthermore co-operate with other water users in the catchment to determine the mass balance for the water resource reserve compliance point.
- 7.2 The Licensee shall submit the results of analysis for the monitoring requirements to the CEO on a quarterly basis under Reference number 27/2/2/X23F/071.

### 8. STORMWATER MANAGEMENT

- 8.1 Storm-water leaving the Licensee's premises shall in no way be contaminated by any substance, whether substance is a solid, liquid, vapour or gas or a combination thereof which is produced, used, stored, dumped or spilled on the premises.
- 8.2 Increased runoff due to vegetation clearance and/or soil compaction must be managed, and steps must be taken to ensure that storm-water does not lead to bank instability and excessive levels of silt entering the stream.
- 8.3 Storm-water shall be diverted from the mine complex site and roads shall be managed in such a manner as to disperse runoff and concentrating the storm-water flow.
- Where necessary, works must be constructed to attenuate the velocity of any storm-water discharge to protect the banks of the affected watercourses.
- 8.5 Storm-water control works must be constructed, operated and maintained in a sustainable manner throughout the impacted area.
- 8.6 The polluted storm-water system shall be designed and implemented to provide suitable routing and pumping capacity for contaminated storm-water form individual facilities to the respective storm-water dams in accordance with the design specifications as contained in the Integrated Water Use License Application report.
- 8.7 The polluted storm-water captured shall be recycled and reused.
- 8.8 The Licensee shall submit a detailed storm-water management plan as prescribed in the Best Practices Guideline: G1 to the CEO within six months of the date of issuance for approval.
- 8.9 All seepage produced by the pollution control dams, must be collected in subsoil and surface seepage interception drains and containment works.
- 8.10 No seepage or contaminated runoff water may be discharged to a watercourse or environment.

# 9. ACCESS CONTROL

9.1 The Licensee must ensure effective access control on the mine residue facility to reasonably prevent entry of domestic animals, game and unauthorised persons while the solid waste disposal sites are operative and during the period of construction for closure.

- 9.2 Notices prohibiting unauthorised persons from entering the mine residue facility, as well as an internationally accepted signs indicating the risks involved in unauthorised entry must be displayed at suitable intervals along the boundary fence of these areas.
- 9.3 The Licensee must take all reasonable steps to maintain service roads in a condition which ensures unimpeded access to the mine residue facility for vehicles involved in closure construction and/or transporting waste and must keep these roads free of waste.
- 9.4 The Licensee must ensure that all entrance gates are manned during the hours of operation/closure construction and locked outside the hours of operational/closure construction.

### 10. CONTINGENCIES

- 10.1 Accurate and up-to-date records shall be kept of all system malfunctions resulting in non-compliance with the requirements of this licence. The records shall be available for inspection by the CEO upon request. Such malfunctions shall be tabulated under the following headings with a full explanation of all the contributory circumstances:
  - 10.1.1 Operating errors
  - 10.1.2 Mechanical failures (including design, installation or maintenance)
  - 10.1.3 Environmental factors (e.g. flood)
  - 10.1.4 Loss of supply services (e.g. power failure) and
  - 10.1.5 Other causes.
- 10.2 The Licensee must, within 24 hours, notify the CEO of the occurrence or potential occurrence of any incident which has the potential to cause, or has caused water pollution, pollution of the environment, health risks or which is a contravention of the licence conditions.
- 10.3 The Licensee must, within 14 days, or a shorter period of time, as specified by the CEO, from the occurrence or detection of any incident referred above, submit an action plan, which must include a detailed time schedule, to the satisfaction of the CEO of measures taken to:
  - 9.3.1 Correct the impacts resulting from the incident
  - 9.3.2 Prevent the incident from causing any further impacts and
  - 9.3.3 Prevent a recurrence of a similar incident.

# 11. AUDITING

- 11.1 The Licensee shall conduct an annual internal audit on compliance with the conditions of this licence. A report on the audit shall be submitted to the CEO within one month of finalisation of the report, and shall be made available to an external auditor shall the need arise.
- 11.2 The Licensee shall appoint an independent external auditor to conduct an annual audit on compliance with the conditions of this licence. The first audit must be conducted within 6 (six) months of issuance of this licence and a report on the audit shall be submitted to the CEO within one month of finalisation of the report.

### 12. INTEGRATED WATER AND WASTE MANAGEMENT

12.1 The Licensee must update an Integrated Water and Waste Management Plan (IWWMP), which must together with the updated Rehabilitation Strategy and Implementation Programme (RSIP), be submitted to the CEO for approval within one (1) year from the date of issuance of this licence.

- 12.2 The IWWMP and RSIP shall thereafter be updated and submitted to the CEO for approval, annually.
- 12.3 The Licensee must, at least 5 years prior to the intended closure of any facility, or any portion thereof, notify the CEO of such intention and submit any final amendments to the IWWMP and RSIP as well as a final *Closure Plan*, for approval.
- 12.4 The Licensee shall make full financial provision for all investigations, designs; construction, operation and maintenance for a water treatment plant shall it become a requirement as a long-term water management strategy.

### 13. GENERAL CONDITIONS

- 13.1 Water samples must be taken from all the monitoring boreholes by using approved sampling techniques and adhering to recognized sampling procedures. Samples should be analysed for both organic as well as inorganic pollutants, as mining activity often lead to hydrocarbon spills in the form of diesel and oil. At least the following water quality parameters should be analysed for:
  - o Major ions (Ca, K, Mg, SO<sub>4</sub>, NO<sub>3</sub>, Cl, F)
  - o pH
  - o Electrical Conductivity (EC)
  - o Total Petroleum Hydrocarbon (TPH)
  - o Total Alkalinity
- 13.2 These should be recorded on a data sheet. It is proposed that the data should be entered into an appropriate computer database and reported to the CEO.
- 13.3 The licensee must drill new boreholes in the area between the current groundwater monitoring points and the Suid-Kaap River. These should be developed such that they allow possible groundwater pollution mitigation (pump and treat) should a need arise.
- 13.4 The Lisensee shall design and construct under drain to cover the entire tailings footprint in order to reduce the seepage load of migration plume, which is expected to move in a North-Westerly direction reaching the Suid-Kaap River after 20 to 35 years with conservative sulphate concentration of between 500 and 1000 mg/l.
- 13.5 Quarterly groundwater quality monitoring must be conducted to establish a database of plume movement trends, to aid in eventual mine closure.
- 13.6 The applicant must ensure in advance that alternative water supply for external water users relying on groundwater is provided to these users should groundwater resources be impacted.
- 13.7 The return water dams must be designed in such a manner that any spillage can be contained and reclaimed without any impact on the surrounding environment.
- 13.8 The Licensee shall at all times together with the conditions of this licence adhere to the Regulations on use of water for mining and related activities aimed at the protection of water resources (GN 704, 4 June 1999).

### APPENDIX VII

Section 21 (j) of the Act: Removing, discharging or disposing of water found underground if it is necessary for the effective continuation of an activity or for the safety of people

1. This licence authorizes Barberton mines (Pty) Ltd: Fairview mine for the removal of water found underground in terms of Section 21(j) water use activities as set out in Table 14:

**Table 14: Water Use Activities** 

| Purpose                                     | Properties                      | Total Water (m³/a) | Co-ordinates |              |
|---|---------------------------------|--------------------|--------------|--------------|
| Dewatering of<br>water found<br>underground | Section A Kaap<br>Block Lot 123 | 779 202 m³/a       | 25°43'55,8"S | 31°06'01.7"E |
| for mine                                    |                                 |                    |              |              |
| continuation.                               |                                 |                    |              |              |

- 2. The licensee shall provide any water user whose water supply is impacted by the water use with potable water.
- The quantity of water removed from underground must be metered and recorded on a daily basis.
- 4. Self-registering flow meters must be installed in the delivery lines at easily accessible positions near the dewatering points.
- 5. The flow metering devices shall be maintained in a sound state of repair and calibrated by a competent person at intervals of not more than once in two years. Calibration certificates shall be available for inspection by the CEO or his/her representative upon request.
- Calibration certificates in respect of the pumps must be submitted to the CEO after installation thereof and thereafter at intervals of two years.
- 7. The CEO must be informed of any incident that may lead to under-groundwater being disposed of contrary to the provisions of this license, by submitting a report containing the following information: -
  - 7.1 nature of the incident (e.g. operating malfunctions, mechanical failures, environmental factors, loss of supply services, etc.);
  - 7.2 actions taken to rectify the situation and to prevent pollution or any other damage to the environment; and
  - 7.3 measures to be taken to prevent re-occurrence of any similar incident.
- The licensee shall follow acceptable construction, maintenance and operational practices to ensure the consistent, effective and safe performance of the underground water removal system.
- 9. Reasonable measures must be taken to provide for mechanical, electrical or operational failures and malfunctions of the underground water removal system.

END OF LICENCE

Inkomati Usuthu Catchment Management Agency Private Bag X 11214 Nelspruit 1200 Director General (Acting)



**Appendix C: Impact Assessment Tables** 

Date: November 2019



| Activity   | Aspect                      | Impact / Risks   | Significance   |                       | Sensitivity of the |            |                              | Scale /          |    |                   | Mitigation (can the impact be reversed, avoided,   |                               | Sensitivity of the |   |                                      |                | Significa |             |
|--|-----------------------------|--|--|-----------------------|--------------------|------------|------------------------------|------------------|----|-------------------|--|-------------------------------|--------------------|---|--------------------------------------|----------------|-----------|-------------|
| emoval of vegetation from new<br>SF footprint  | Terrestrial<br>Biodiversity | Direct loss of species & habitat   | Vegetation clearance will definitely take place. Given the site location at the old Bramber TSF footprint, vegetation is not regarded as sensitive. The impact will be of high severity as vegetation will be destroyed entirely on footprint areas. The duration will be permanent, given the TSF will remain after closure. The Impact will be isolated to the footprint area. Overall, impact significance is regarded as Moderate. Impact duration can be reduced by rehabilitation (re-instating vegetation on the TSF) but this does not significantly reduce impact significance. | Probability           | Aspect             | Moderate   | Duration                     | Extent           |    |                   | managed or miligated?)  Demarcate footprint area clearly and prevent vegetation clearance outside of the area absolutely required for construction of the proposed new TSF. Verify the presence / absence of protected or sensitive species prior to initiating vegetation clearance, and ensure the necessarily permits are obtained if required prior to disturbing such species. Ensure concurrent rehabilitation of the TSF side slopes as it is developed, and the implementation of final rehabilitation measures after Life of the facility is reached. | Probability                   | Aspect             | Severity of the Impact                    |                                      | Scale / Extent | Mitig     |             |
| emoval of Vegetation for road<br>pgrades and reclamation of<br>laterial from historic dumps                                  | Terrestrial<br>Biodiversity | Direct loss of species & habitat   | In the absence of detailed vegetation studies, vegetation is regarded as very sensitive. Vegetation clearance will definitely take place and impact severity will be high. Mitigation and rehabilitation will be able to reduce the duration and extent of the impact.   | 5 Definite 5 Definite | 1 Not sensitive    | Moderate   | 5 Permanent 4 Long Term      |                  |    | Moderate High     | Keep affected footprints to the absolute minimum required and demarcate areas clearly to prevent unnecessary clearance of vegetation. Ensure permits for the relocation of protected species (if any) are obtained prior to any clearance taking place. Retain species for use in rehabilitation. Implement concurrent rehabilitation and ensure rehabilitation is successful by monitoring and adjusting rehabilitation measures as required.   | 5 Definite                    | 1 Not sensitive    | 4 Moderate to High  4 Moderate to High    | Short to                             | 1 Isolated     | 50 M      |             |
| Presence of employees on site for construction of TSF, roads and reclamation activities.                                     | Terrestrial<br>Biodiversity | Illegal harvesting of<br>plants and animals<br>(Poaching)  | illegal harvesting is considered highly likely in the absence of mitigation measures. In the absence of detailed studies, affected fauna and flora is regarded as highly sensitive and impact severity is rated as High. The risk will cease as activities conclude and employees leave the areas. Without mitigation the impact could extend to the wider areas.  | Highly                | 4 Very sensitive   | Moderate   | Medium<br>3 Term             | 3 Local          |    | Moderate          | Employee awareness training could reduce the likelihood of illegal harvesting taking place and reduce the impact severity and scale. Prevent access to adjacent areas and the nature reserve by providing proper oversight and transportation to construction crews.   | 2 Possible                    | 4 Very sensitive   | 3 Moderate                                | 3 Medium Term                        |                |           | Lo          |
| Site disturbance, construction activities (roads, TSF), reclamation activities and material transport. Operation of new TSF. |                             | Habitat degradation<br>due to dust, emissions,<br>water quality impacts<br>and general<br>disturbance of the sites | Habitats in the mountainous areas are cosnidered sensitive in the absence of detailed ecological studies. Road construction and reclamation activities will most likley result in habitat degradation. Mitigation measures can reduce impact severity, duration and scale.   | Highly                | 4 Very sensitive   |            |                              |                  |    | Moderate Moderate | Control dust and emissions arising from activities. Minimize activity footprint. Implement measures to prevent water pollution (sedimentation from erosion and pollution from spillages). Rehabilitate areas once reclamation from a dump is complete (shape and vegetate).  | 3 Probable                    | 4 Very sensitive   | 2 Slight to Moderate                      |                                      |                |           | Lo          |
|  | Terrestrial<br>Biodiversity | Increased proliferation of alien invasive species.   | Disposal of vegetative material could possibly result in alien or invasive species spread. The aspect is regarded as very sensitive and the impact will manifest in the long term over the local area without mitigation. Severity is regarded as moderate and overall significance is Low without mitigation. Mitigation can reduce the scale and duration of the potential impact.   |                       | 4 Very sensitive   |            |                              |                  | 28 | Low               | Ensure plant material that is removed from site is disposed of legally and so as to prevent the spread of alien species from seeds which may be present in the removed vegetative material.  | 2 Possible                    | 4 Very sensitive   | 3 Moderate                                | 3 Medium Term                        |                |           | Lo          |
| Seneral disturbance  | Terrestrial<br>Biodiversity | Increased proliferation of alien invasive species.   | Further disturbance of the site is highly likely to result in proliferation of alien and/or invasive species throughout the site, which could spread to a local scale without mitigation. Such an impact would be of moderate to high severity, on a very sensitive aspect, in the long term. Over-all significance is regarded as high without mitigation. Management measures can potentially reduce the likelihood, extent, duration and magnitude of the impact.   | Highly                | 4 Very sensitive   | Moderate   | 4 Long Term                  |                  | 60 | High              | Compile and Implement alien invasive species identification and management plan throughout the project. Rehabilitate areas and continue to monitor and manage until viable ecosystems have re-established.   |                               | 4 Very sensitive   |   | Short to<br>2 Medium Term            |                |           | L           |
| increased construction and mine<br>vehicles on roads - accidental<br>collisions.   | Terrestrial<br>Biodiversity | Fauna mortalities  | Fauna mortalities on roads is highly likely to increase due to increased vehicular activity, especially in the mountains. Fauna of the area is regarded as svery ensitive in the absence of detailed studies. The impact will be of high severity and medium term, but will be limited in extent. Impact likelihood can be reduced by mitigation measures.   | Highly                | 4 Very sensitive   |            | Medium<br>3 Term             | 2 Site           |    | Moderate          | Strict speed limits and driver awareness training, Vehicles will use only existing and approved routes. No driving on these roads will be allowed at night-time.   | 2 Possible                    | 4 Very sensitive   | 5 High                                    | 3 Medium Term                        |                |           | L           |
| ighting at the site attracting sects.  | Terrestrial<br>Biodiversity | Fauna mortalities  | It is highly probable that lighting will attract insects resulting in their death, which is regarded as a high severity impact to a sensitive aspect. Lighting will probably not affect insect populations beyond the site. The impact duration at the new TSF is permanent. Mitigation can reduce the probability and extent of the impact.   | Highly                | 4 Very sensitive   |            | 5 Permanent                  | 2 Site           | 64 | High              | Use appropriate downlights and only where necessary.   | 2 Possible                    | 4 Very sensitive   | 4 Moderate to High                        | 5 Permanent                          | 1 Isolated     |           | L           |
| ncorrect waste management<br>and bad housekeeping  | Terrestrial<br>Biodiversity | Attracting problem animals to site   | It is possible that problem animals will be attracted by incorrect waste management. The impact is of moderate severity, medium term and may affect the whole site. Over-all significance is considered low, and is further reduced by proper waste management at the site.  |                       |                    | 3 Moderate | Medium<br>3 Term             | 2 Site           | 22 | Low               | Ensure proper housekeeping and adequate waste management in designated facilities to ensure separation of waste and that waste is not stored on site for excessive periods of time.  | 2 Possible                    | 3 Sensitive        | 3 Moderate                                | 3 Medium Term                        |                |           | Lo          |
| egetation clearance, soil<br>ripping and construction of new<br>F  | Aquatic<br>Biodiversity     | Deterioration of surface water quality   | It is highly probable that construction activities will lead to sedimentation in the absence of mitigation. The receiving water body (Suidkaap River) is regarded as highly sensitive. Impact severity of sedimentation is considered moderate, and short-term given the duration of the construction phase, but impacts could manifest beyond the local area.   | Highly<br>4 Probable  | 4 Very sensitive   | 3 Moderate | Short to<br>Medium<br>2 Term | 4 Regional       | 52 | Moderate          | Implement erosion control measures and sediment traps to reduce impact probability, severity and extent.   | 2 Possible                    | 4 Very sensitive   | 3 Moderate                                | Short to<br>2 Medium Term            | 2 Site         | 22        | L           |
|  | Aquatic<br>Biodiversity     | Deterioration of surface water quality   | Unchecked surface water runoff an potential seepage from the new TSF will probably lead to pollution of very sensitive downstream water resources if not mitigated. The impact will be permanent given the nature of the TSF, of moderate severity and potentially extending beyond the local area.  | 3 Probable            | 4 Very sensitive   | 3 Moderate | 5 Permanent                  | 4 Regional       | 48 | Moderate          | Design and construction of the new TSF will be to the relevant engineering standards to prevent seepage and contaminated runoff from entering downstream water resources. Aquatic Biomonitoring and Water monitoring and reporting as per the IWUL conditions should continue (per updated IWUL for the proposed new TSF).   | 2 Possible                    | 4 Very sensitive   | 3 Moderate                                | 5 Permanent                          | 2 Site         | 28        | L           |
| Construction of roads to access istoric dumps  | Aquatic<br>Biodiversity     | Deterioration of surface water quality   | The routes to the historic dumps affect several drainages on the mountainsides. The planned road upgrades could cause siltation of receiving waterbodies. In the absence of detailed studies, receiving water bodies are deemed very sensitive. The impact will be moderate, given the distance from the roads to nearby streams, and will only manifast during the construction phase, and likley be limited to the site.   | 2 Probable            | 4 Von coo siii     | 2 Moderni  | Short to<br>Medium           | 2) Site          | 22 | lew               | Implement erosion control measures and sediment traps to reduce impact probability, severity and extent.   | 2 Possible                    |                    | 2 Slight to the desired                   | Short to                             | 1 Irolated     | 10        | nel         |
|  | Aquatic<br>Biodiversity     | Deterioration of surface water quality   | Physical reclamation of material that was dumped within watercourses, will cause sedimentation of the watercourses are flowing. Watercourses are regarded as very sensitive in the absence of detailed studies, Impact severity will be moderatehigh but only last for the duration of reclamation activities and be limited to the site.  | Highly                | 4 Very sensitive   | Moderate   | Short to<br>Medium<br>2 Term | 2 Site<br>2 Site | 48 | Low<br>Moderate   | Implement erosion control measures and sediment traps to reduce impact severity and extent. Once the dumps are reclaimed, it is expected that surface water quality will improve as drainage lines will not longer be affected by the historically dumped material.  | 2 Possible  4 Highly Probable | 4 Very sensitive   | 2 Slight to Moderate 2 Slight to Moderate | 2 Medium Term Short to 2 Medium Term |                | 18 Insi   | nsign<br>Lo |

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| Stripping of remaining topsoil in preparation for TSF construction                                | Soils, land use<br>and<br>capability   | e<br>Loss of topsoil  | At least some topsoil (regarded as a sensitive resource) will definitely be lost if the impact is not mitigated. The area is small (6.5 Ha). Mitigation should aim to reduce impact likelihood.  |                               |                              |                       |                                |          |       |                    | Strip topsoil ahead of construction and stockpile separately. Protect stockpiles from erosion, compaction and pollution. Limit stockpile height and slope angle. Vegetate long term stockpiles (material that will not be used in rehabilitation within three months).  |                               |                              |                                  |                            |            |    |          |
|---|--|---|--|-------------------------------|------------------------------|-----------------------|--------------------------------|----------|-------|--------------------|---|-------------------------------|------------------------------|----------------------------------|----------------------------|------------|----|----------|
| Stripping of soils for road upgrade and recovery of material from historic dumps                  | s Soils, land use<br>and<br>capability | e<br>Loss of topsoil  | It is considered unlikely that any topsoil remains on the road footprints, or on the historic dumps.   | 5 Definite 2 Possible         | 3 Sensitive 4 Very sensitive |                       | 4 Long Term 4 Long Term        |          |       | Moderate<br>Low    | The specialist soil study will verify the status of soils on the site. It is anticipated that reclamation of the historically dumped material will expose underlying topsoil resources which may recover.   | 2 Possible 2 Possible         | 3 Sensitive 4 Very sensitive | 3 Moderate  3 Moderate           | 4 Long Term                | 1 Isolated | 22 |          |
| Stockpiling of topsoil  | Soils, land use<br>and<br>capability   | Loss of topsoil   | Without mitigation, it is higly likely that stockpiles will become polluted or erode. Topsoil is regarded as sensitive. Mitigation should reduce the impact likelihood.  | Highly                        | 4 Very sensitive             | Moderate              | 4 Long Term                    |          |       | Moderate           | Protect stockpiles from erosion, compaction and pollution. Limit stockpile height and slope angle. Vegetate long term stockpiles (material that will not be used in rehabilitation within three months). Prevent vehicle access on stockpiles. Prevent use of chemicals on stockpiles. Prevent alien invasive species from establishing on stockpiles and eradicate / control if these do establish despite prevention methods.                     | 2 Possible                    | 4 Very sensitive             | 4 Moderate to High               | 4 Jong Term                | 1 Isolated | 26 | Low      |
| Vehile movement, road<br>construction, establishment of<br>new TSF                                | Soils, land use<br>and<br>capability   | Soil compaction<br>(leading to reduced<br>infiltration, increased<br>runoff etc.) | Soils on roadways and infrastructure areas will definitely be compacted. Soils are regarded as sensitive in the absence of detailed studies. The impact severity is moderate – high and may manifest over the whole site in the long term, without mitigation. Management and rehabilitation can reduce the scale and duration of the impact.  |                               | 4 Very sensitive             | Moderate              | 4 Long Term                    |          | 70    |                    | Limit vehicle movement and construction footprints to approved, minimum required area. Rehabilitate roads once no longer required to access historic dumps.   | 5 Definite                    | 4 Very sensitive             | 3 Moderate                       | Short to                   |            | 50 |          |
| Reclamation of historic dumps<br>from the MRA that overlaps with<br>the Nature Reserve            | Land Use                               | Perceived change in<br>land use from<br>conservation to mining                    | At a distance, the historic dumps within the nature reserve are not identified ny the layman as such. Reclamation activities will most likely look out of place to tourists and conservationists. The issue of conflicting land uses is deemed very sensitive and the severity will be moderate - high. It is anticipated that the impact will be of short duration and isolated due to screening afforded by vegetation and topography. | Highly                        | 4 Very sensitive             | Moderate              | 1 Short Term                   |          |       | Moderate           | Ensure adequate public consultation to manage public perception and expectation (avoid surprise). Ensure the area is adequately rehabilitated and limit affected footprint as far as possible to reduce impact severity.  |                               |                              | 3 Moderate                       | 1 Short Term               | 1 Isolated | 32 |          |
| New TSF construction & operation  | Land Use                               | Reduced Land<br>Capability  | The site was previously used for a TSF and land capability is only reduced in the additional 6.5 Ha affected between the existing New Bramber TSF and reclaimed Bramber TSF, which area is not   |                               |                              |                       |                                |          |       |                    | No mitigation available or required, the affected land (6.5 Ha between the original Bramber and New Bramber TSFs) will be the only land affected.   |                               |                              |                                  |                            |            |    |          |
| Exposed areas, Vehicle and machinery operation causing dus and fugitive emissions                 | t Air Quality                          | Deterioration in air quality  | Vehicle and machinery operation, and exposed areas after vegetation clearing, will almost definitely give rise to increased dust and emissions. Air quality is deemed a sensitive aspect. The impact is not expected to be severe given the context and will be short-lived (cease once construction and reclamation is complete and areas rehabilitated). Air quality impacts can affect regional air quality beyond the site.          | Highly                        | 1 Not sensitive              | Slight to             | Short to                       |          |       |                    | Limit exposed areas (extent and duration). Ensure vehicles and machinery are in good working order to avoid excessive emission when machines are in disrepoir. Expand the mine's dust fallout monitoring programme and ensure compliance to dust standards. Monitor PM10 and PM2.5 and report to NAES. if standards are exceeded, implement stricter dust control measures (wetting, chemical suppressants, road surfacing to name a few options to | 5 Definite                    | 1 Not sensitive              | 1 Slight                         | 4 Long Term  Short to      | 1 Isolated | 35 |          |
| Fires (accidental or deliberate)  | Air Quality                            | Deterioration in air quality  | If not mitigated, it is highly likely that the construction workforce will have cooking fires and potentially burn waste on site. This could easily lead to accidental veld fires which could spread regionally. The aspect is regarded as very sensitive and severity would be high. The risk is eliminated once the workforce leaves the site.   | 4 Probable  Highly 4 Probable | 4 Very sensitive             | 2 Moderate            | 2 Term  Short to Medium 2 Term | 3 Local  |       | Moderate  Moderate | Fires will not be allowed on site. Awareness training will also emphasize the risks and impact of fires. All waste to be managed in accordance with the Mine's waste management plan and applicable norms and standards. As a local land owner it is recommended that BML adheres to the guidelines set out by the local Fire Protection Association (LEFPA, http://www.lefpa.co.za/) and maintain the relevant permits and fire-breaks in areas    | 3 Probable  4 Highly Probable | 3 Sensitive                  | 2 Slight to Moderate  3 Moderate | 2 Medium Tem  3 Medium Tem | 2 Site     | 27 |          |
| Vegetation clearance and soil stripping leading to erosion and subsequent downsream sedimentation | Surface Wate                           | r Deterioration of surface<br>water quality                                       | Erosion is considered highly likely if not mitigated. Local surface e water resources are very sensitive and the impact severity will be moderate-high and could affect the local catchment as long as construction and/or reclamation activities occur.   | Highly<br>4 Probable          | 4 Very sensitive             | Moderate<br>4 to High | Medium<br>3 Term               | 3 Local  | 56    | Moderate           | Prevent erosion on site. Keep cleared areas to the minimum area required and install silt traps at discharge points of clean water systems to reduce impact likelihood, severity and extent.  | 2 Possible                    | 4 Very sensitive             | 3 Moderate                       | 3 Medium Term              | 2 Site     | 24 | Low      |
| Use of chemicals and chemical toilets on site during construction , reclamation activities        | / Surface Wate                         | Deterioration of surface<br>water quality   | If not managed, spills are highly probable. Chemical / sewage e spills will have a high severity, and can affect the whole local area in the long term. Management measures will aim to prevent spills, and contain the extent of accidental spills.   | Highly                        | 4 Very sensitive             |                       | 4 Long Term                    |          |       |                    | Contain dirty water on site as per GN704. Ensure facilities are constructed to prevent spills, and contain spills in the event of an accident. Implement Emergency Response Plans in the event of accidental spills. Appoint reputable contractor to service temporary toilets to ensure prevention of sewage spills.   | 2 Possible                    | 4 Very sensitive             | 5 High                           | 4 Long Term                | 1 Isolated | 28 |          |
| Surface water runoff contaminating downstream environments.                                       | Surface Wate                           | r Deterioration of surface<br>water quality                                       | There is always a possibility for water management infrastructure to overlop or leak. If this happens, it could affect the local catchment in the medium term in moderate-high severity.   | 2 Possible                    | 4 Very sensitive             | Moderate<br>4 to High | Medium<br>3 Term               | 3 Local  | 28    | Low                | All infrastructure will be designed in accordance with GN704, and to contain the 1:100-year flood to prevent overtopping of dirty water containment infrastructure into clean water systems. Water containment infrastructure to be operated with adequate freeboard.   | 2 Possible                    | 4 Very sensitive             | 4 Moderate to High               | 3 Medium Term              | 3 Local    | 28 | Low      |
| Containment of water on site (ii dirty water catchments)  | <sup>n</sup> Surface Wate              | r Reduced surface water<br>availability   | The impact will definitely manifest as it is a legal requirement to contain dirty water on site. Due to the location of the new TSF at the old Bramber TSF footprint (which is also part of the dirty-water catchment) the impact is expected to be slight but will be permanent and could affect the local catchment.   |                               | 4 Very sensitive             | 1 Slight              | 5 Permanent                    | 3 Local  | 65    | High               | Maintain the Mine's dirty water footprint as small as possible. Ensure adequate rehabilitation of the TSF at closure to allow surface runoff to report back to the clean water system.  | 5 Definite                    | 4 Very sensitive             | 1 Slight                         | 4 Long Term                | 2 Site     | 55 | Moderate |
| Spills on site leaching to<br>groundwater.  | O Groundwater                          | Deterioration of groundwater quality  | Spills on site are highly probable if not managed/prevented. Groundwater is regarded as sensitive (specialist study in the EIA phase will confirm this). Impact severity will be moderate in the long term and could affect the whole local area.  | Highly<br>4 Probable          | 3 Sensitive                  | 3 Moderate            | 4 Long Term                    | 3 Local  | 52    | Moderate           | Spill prevention and management on site. Ensure dirty water is contained on site and treated prior to discharge. Ensure vehicle/machinery servicing, chemical storage etc. only occurs in purpose-built facilities with impervious floors. Groundwater monitoring as per IWUL.  | 2 Possible                    | 3 Sensitive                  | 3 Moderate                       | 4 Long Term                | 3 Local    | 26 | Low      |
| TSF and RWD impacts or groundwater quality.   | <sup>n</sup> Groundwater               | Deterioration of groundwater quality  | It is highly likely that the new TSF (and the existing New Bramber TSF and other TSFs on site) may have a permanent, moderate-high impact on regional groundwater. The EIA-phase specialist study will confirm this.   | Highly<br>4 Probable          | 3 Sensitive                  | Moderate<br>4 to High | 5 Permanent                    | 4 Region | al 64 | High               | Ensure that seepage of contaminated water to groundwater from the new TSF is prevented (i.e. by lining of the facility and/or intercepting potential seepage and returning water to the dirty-water system). The EIA-Phase specialist study will model the extent of potential contaminant transport and provide possible mitigation measures. It is expected that mitigation will be able to lessen the extent and severity of the impact.         | 4 Highly Probable             | 3 Sensitive                  | 3 Moderate                       | 5 Permanent                | 3 Local    | 56 | Moderate |

Barberton Mines (Pty) Ltd Fairview Mine - New TSF reclamation f historic dumps Impact Assessment and Management Plan - Scoping Phase

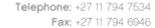
Date: November 2019



| Construction and presence of the resources Resources                                     | Alteration of the Visual<br>Resource                    | The new TSF will definitely alter the visual resource, which is not regarded as sensitive against the backdrop of the other TSFs and mining infrastructure in this area. The severity of the impact will be slight to moderate (at most) considering the existing New Bramber TSF. The Impact will be permanent and likely be visible on a local scale     | 5 Definite | 1 Not sensitive  | Slight to<br>2 Moderate | 5 Permanent      | 3 Local    | 55 | Moderate | Implementation of the Mine's rehabilitation plan will lessen impact severity and duration to an extent (the TSF will still be present but blend in with its surroundings). Careful consideration to night-time lighting can also reduce impact severity and extent at night.                 | 5 Definite | 1 Not sensitive  | 1 Slight             | 3 Medium Term | 2 Site     | 35 | Low  |
|--|---|--|------------|------------------|-------------------------|------------------|------------|----|----------|--|------------|------------------|----------------------|---------------|------------|----|------|
| Reclamation of the historic dumps Visual Resources                                       | Alteration of the Visual<br>Resource                    | Reclamation activities will alter the visual resource, which is sensitive within the BNR. Severity is expected to be rather high but duration is not extensive and the topography will probably limit the zone of visual influence.  | 5 Definite | 3 Sensitive      | Moderate<br>4 to High   | 1 Short Term     | 1 Isolated | 45 | Moderate | Ensure the affected footprints are limited as far as possible and that adequate and concurrent rehabilitation (including shaping and re-vegetation) is implemented. No nigh-time activities should be allowed.   | 5 Definite | 3 Sensitive      | 2 Slight to Moderate | 1 Short Term  | 1 Isolated | 35 | Low  |
| Operation of machinery and equipment and movement of Noise vehicles                      | Increased ambier noise                                  | It is likely that the project activities will contribute to the generation of noise. In the context of the existing Mine, the aspect is not considered sensitive and the severity is not expected to be significant or audible beyond the activity footprints.   | 3 Probable | 3 Sensitive      | Slight to<br>2 Moderate | Medium<br>3 Term | 2 Site     | 30 | Low      | No construction or reclamation activities should occur at night-time. Vehicles and machinery should be serviced regularly to prevent the noise these machines can generate if they are in disrepair.   | 3 Probable | 3 Sensitive      | 1 Slight             | 3 Medium Term | 2 Site     | 27 | Low  |
| Movement of vehicles to and Employee from reclamation activities safety                  | Accidents / collision on mountain roads                 | If not mitigated, it is highly probable that employee safety will be negatively affected, considering the mountainous terrain. If the is impact manifests it may be of high severify, permanent nature on an irreplaceable aspect (loss of life). Such impact would have a local extent and is regarded as high. Mitigation reduces the impact likelihood. | Highly     | 5 Irreplaceable  | 5 High                  | 5 Permanent      | 3 Local    | 72 | High     | Ensure the road upgrades on the mountain roads include adequate safety measures (mirrors, line-of-sight where possible, speed-reducing-measures). Implement driver training. Prevent pedestrian use of roads in this area.   | 2 Possible | 5 Irreplaceable  | 5 High               | 5 Permanent   | 3 Local    | 36 | Low  |
| Presence of employees on site for construction of TSF, roads and reclamation activities. | & Workers accessin restricted areas outsid of the site. | The mine are less likely to engage in criminal activity than   |            | 4 Very sensitive | 5 High                  | 4 Long Term      | 3 Local    | 32 | Low      | Implement Environmental awareness training programs. Prevent access to unauthorised areas. Set up a community safety forum.  | 2 Possible | 4 Very sensitive | 5] High              | 4 Long Term   | 3 Local    | 32 | Low  |
| Presence of new Fairview TSF Community Safety 36   | TSF Failure   | The TSF is being designed by qualified engineering teams to acceptable standards. However, there is always some possibility of failure which could result in loss of life (permanent loss of an irreplaceable aspect impacting on a local scale). The probability of this occurring is however regarded as low.  | 2 Possible | 5 Irreplaceable  | 5 High                  | 5 Permanent      | 3 Local    | 36 | Low      | There is always a risk of failure of impoundment infrastructure. All relevant engineering standards to be implemented in design and construction. Monitoring to be undertaken to ensure stability of infrastructure and prevent failure, which would impact downstream land uses and people. | 2 Possible | 5 Irreplaceable  | 5 High               | 5 Permanent   | 3 Local    | 36 | Low  |
| Reclamation of dumps older than Heritage 60 years Resources                              | Destruction of histori<br>"structures"                  | pnose will confirm, but it is not expected that these dumps are sensitive. Impact severity will be high and permanent, but isolated.   | 5 Definite | 1 Not sensitive  | 5 High                  | 5 Permanent      | 1 Isolated | 60 | High     | No mitigation is possible, other than the no-go option which would mean the dumps will remain as they are (definitely obstructing and potentially polluting water resources).  | 5 Definite | 1 Not sensitive  | 5 High               | 5 Permanent   | 1 Isolated | 60 | High |
| Construction and reclamation Heritage activities Resources                               |   | or It is possible that other heritage resources, as yet unknown, may<br>of be damaged by the activities. Impacts to heritage resources are<br>e considered permanent, high-severity impacts on irreplaceable<br>resources.   | 2 Possible | 5 Irreplaceable  | 5 High                  | 5 Permanent      | 1 Isolated | 32 | Low      | Undertake an Archaeological Impact Assessment in the<br>EIA Phase to identify All heritage resuorces in proximity of<br>potentially affected footprints, and implement the<br>recommendations of the specialist.   | 2 Possible | 5 Irreplaceable  | 5 High               | 5 Permanent   | 1 Isolated | 32 | Low  |



Appendix D: Details of the PPP





E-mail: info@cabangaenvironmental.co.za

# PAN AFRICA RESOURCES: BARBERTON MINES – FAIRVIEW TSF AND RECLAMATION OF HISTORIC DUMPS

# REPORT ON THE PUBLIC PARTICIPATION PROCESS

**NOVEMBER 2019** 





### 1 INTRODUCTION

This report outlines the Public Participation Process (PPP) that has and will be followed for the application made by Pan Africa Resources PLC: Barberton Mines (Pty) Ltd – Fairview Mine, hereinafter referred to as "the Applicant".

Barberton Mines, which forms part of Pan African Resources PLC, owns and operates the existing Fairview Mine near the town of Barberton, Mpumalanga. Mining in the area commenced in the late 1880's.

At Fairview (Reference Number MP/30/5/1/2/2/191 MR) the Mining operation comprises underground gold mining, as well as surface reclamation of Tailings material. Ore is processed on site at the Fairview Infrastructure area to produce gold. Tailings waste produced by these processes, are currently being deposited on the existing Tailings Storage Facility (TSF) known as the BTRP TSF, or the New Bramber Tailings Dam. The BTRP/New Bramber TSF does not have sufficient capacity to facilitate ongoing production. Barberton Mines therefore proposes to construct a new facility at the site of the original Bramber TSF which has since been reclaimed. The proposed TSF will be referred to as the Fairview TSF.

Historical gold mining in the area has resulted in several waste dumps throughout the area. Many of these dumps still contain high percentages of gold. In addition to the proposed construction of the new Fairview TSF, Barberton Mines wishes to obtain the necessary authorizations to recover material from these historic dumps via mechanical methods and reprocess the material in the existing Fairview Plant. This reprocessing has two main objectives, namely gold recovery from the deposits and environmental clean-up.

Cabanga Environmental has been appointed by the Applicant as the independent Environmental Assessment Practitioner (EAP) to facilitate the required environmental authorisation application processes and associated PPP.

The PPP aims to involve the authorities and Interested and Affected Parties (I&APs) in the project application process; and determine their needs, expectations and perceptions. An open and transparent process was and will be followed at all times and is based on the reciprocal dissemination of information.

The PPP was designed to provide sufficient and accessible information to I&APs in an objective manner to assist them to:

- Raise issues of concern and suggestions for enhanced benefits;
- Contribute local knowledge and experience;
- Verify that their issues have been captured;

The following sections outline the steps that have and will be undertaken in line with the National Environmental Management Act, 1998 (Act No 107 of 1998) (NEMA) and its Regulations (GNR 326 – PPP guideline and Chapter 6 of the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended). All the relevant documents have been included as Annexures where relevant.



### 2 PPP UNDERTAKEN TO DATE

### 2.1 Identification of Authorities

### 2.1.1 Competent Authority

As per NEMA and its Regulations, the Competent Authority for the Environmental Authorisation and Waste Management License Processes was identified as the Department of Mineral Resources (DMR).

### 2.1.2 Regulatory Authorities

Local and Regional authorities were identified from similar projects in the past and included in the I&AP register (**Annexure A**).

The Authorities contacted with regards to this project include:

- Mpumalanga Department of Economic Development, Environment and Tourism (MDEDET)
- Mpumalanga Tourism and Parks Agency (MTPA)
- Inkomati- Usuthu Catchment Management Agency (IUCMA)
- Department of Environmental Affairs (DEA)
- City of Mbombela Local Municipality
- Ehlanzeni District Municipality
- South African Heritage Resources Agency (SAHRA)
- City of Mbombela Local Municipality Ward Councillor- Ward 43
- Department of Human Settlements, Water and Sanitation
- Department of Rural Development and Land Reform
- Department of Transport
- Department of Public Works

### 2.1.3 Land Owners

Landowners of the directly affected properties were identified and included in the I&AP register (see **Annexure A**). Directly affected landowners are summarised in Table 1 below:

Table 1: Land Owners of the directly affected properties

| Farm                           | Registered owner                    |
|--------------------------------|-------------------------------------|
| Sheba 940JU                    | National Government Of South Africa |
| Fairview 542 Portion RE        | Barberton Mines Pty Ltd             |
| Bramber South 349 Portion Re   | Barberton Mines Pty Ltd             |
| Bramber Central 348 Portion Re | Barberton Mines Pty Ltd             |
| Worrall 352 Portion Re         | Provincial Government Of Mpumalanga |



### 2.1.4 Communities

The following community representatives and resident associations were identified and included in the I&AP register (**Annexure A**):

Lomshiyo Trust

# 2.1.5 Adjacent Land Owners / Users:

Landowners and land users immediately adjacent properties were identified and included in the I&AP register (**Annexure A**) as far as possible.

### 2.2 Notification

### 2.2.1 Background Information Documents

Background Information Documents (BIDs) were compiled in English and SiSwati and were distributed via e-mail and post to all the identified authorities, organs of state as discussed above and I&AP's from old databases and the new database compiled.

Hard Copies were hand delivered on the 5-6<sup>th</sup> November 2019 to affected parties (land owners and users) where possible. In some cases no one could be located on the property; in such a case the BID was attached to the property gate.

The purpose of the BID was to:

- Introduce the project to the I&APs;
- Inform I&APs of the proposed applications and associated regulatory processes;
   and
- Initiate a process of public consultation to record perceptions and issues.

A copy of the BID has been included in **Annexure B** for reference and proof of notification has been included in **Annexure C**.

### 2.2.2 Advertisements

An advertisement, informing people of the proposed activities and requesting readers to register as I&APs, was placed in one (1) local newspaper (in both English and Siswati):

• Newshorn, publication date 13th November 2019.

A copy of this advertisement will be appended to the **Final Scoping Report**. At the time of this submission the newspaper had not been published as yet.

### 2.2.3 Notices / Posters

A2 posters, written in English and Siswati, informing people of the proposed activities and requesting I&APs to register were placed on the **site boundary fence** and at other public locations; including:

- Mine Village
- City of Mbombela Local Municipality

Please refer to **Annexure D** for a copy of the posters, and photographic evidence thereof.



### 2.3 Public Meetings

The Scoping Phase Public Meeting is anticipated to take place at the end of November 2019. The purpose of the meeting is to introduce the project to I&APs and explain the environmental authorisation process. All registered I&APs will be notified of the meeting's date through emails and sms's.

Copies of the minutes will be sent to all registered I&APs. Minutes will be sent via e-mail and people who do not have access to e-mail will be sent an SMS informing them that the minutes are available and advising them where to find copies thereof. In addition, the minutes will be uploaded onto the Cabanga website for download.

A second public meeting is planned for the EIA phase of the application process.

## 2.3.1 Consultation Meetings

A consultation was held on 5<sup>th</sup> November 2019 with representatives of the local community, including the Ward Councillor. Minutes of this meeting can be found under **Annexure E**. BID's were also delivered to attendees of this meeting.

### 2.4 Document Review

### 2.4.1 Scoping Report

The Draft Scoping Report will be made available to the public for review and comment from the 13 November 2019 to 13 December 2019 at the following locations:

- Online at www.cabangaenvironmental.co.za;
- At the Barberton Public Library; and
- At the Singobile Youth Centre / Community Centre

All registered I&APs will be informed of the reports availability via e-mail, fax and post.

### 3 SUMMARY OF ISSUES AND RESPONSE

Table 2 below summarises the issues and responses received from the various authorities, organs of state and I&APs to date. Copies of all correspondence has been attached as **Annexure E**.

Table 2: Issues and Response Table

| Comment (from community meeting 5 November 2019)  | Response  |
|---|---|
| It was stated that a company named Mabaclocks claim to own the historic dumps in the mountains and that they are reclaiming and processing similar material just outside of the border of the nature reserve. The legal status of these operations isn't clear. | Cabanga committed to look into the matter by consulting the SAMRAD system to verify if such a license is in place.  It was explained that ownership of such historic dumps usually belongs to the owner / person responsible for the surface rights, under common-law obligations, which in this case would be the nature reserve, or the Mine, as the case may be.   |
| The question was raised: how many people will benefit from this project.  | It was explained that the project is not aimed at the creation of new job opportunities, but that the Mine needs additional TSF capacity, to keep operating the plant and the Mine. Thus, the retention of the approximately 2000 existing jobs at Fairview Mine will be at risk if the project is not implemented.  Some opportunities may be associated with the project and more detail should be provided in the scoping phase and EIA phase reports and meetings.          |
| A community member asked whether the project will encroach on the community garden and other surrounding cultivated areas, and asked about the timing of construction of the new TSF.   | It was confirmed that the community garden and other surrounding areas will not be directly affected as the new TSF is proposed on the footprint of the previous Bramber TSF, and adjoining the existing BTRP TSF (New Bramber Tailings Dam). The new TSF may not be built until all the necessary authorizations are in place. The EIA process normally takes about 12 months but there is pressure from the Mine Management to complete this EIA process as soon as possible. |
| The level of involvement of Provincial Government Departments in the EIA Process was questioned.  | It was explained that the Department of Mineral Resources is the competent authority in terms of this application, and that Provincial Departments of agriculture and environmental affairs as well as other State Owned Entities (SOE's) and various organizations are informed of the Project, as part of the PPP, and invited to attend meetings and provide comments.   |
| A community member asked whether the ongoing reclamation activities and the new TSF will affect air quality and/or water resources negatively within the community.   | The impacts of reclamation would have been assessed as part of the BTRP applications. Those impacts should be considered in the reports, as they would be cumulative to any new impacts associated with this proposed project. It was also confirmed that an air quality impact assessment, hydrology impact assessment (surface water) and hydrogeology impact assessment (groundwater) has been commissioned as part of the EIA Process.                                      |
| A community member wanted to know if Cabanga Environmental will contribute to the community projects such as the community centre, as part of their corporate social responsibility.  | Cabanga and Barberton Mines explained that all contractors to Barberton Mines, including Cabanga in this case, commits to making a contribution, calculated as a percentage of the contract value, to the Barberton Mines Transformation Trust (BMTT), from where the Mine is able to make more meaningful contributions to community projects in a coordinated manner.   |
| A request was made to include the reference number for the application on the Plans.  | It was confirmed that the correct reference number is displayed on the Background Information Document (BID) which was distributed in English and SiSwati to all attendees, and that future plans will also carry the reference number.   |

# **ANNEXURE A:**

# REGISTER OF INTERESTED AND AFFECTED PARTIES (I&APS)

| Affected Farm properties          |  |  |
|-----------------------------------|--|--|
| Farm                              | Name/Company   |  |
|                                   |  |  |
| Sheba 940JU                       | National Government Of South Africa                  |  |
| Fairview 542 Portion RE           | Barberton Mines Pty Ltd                              |  |
| Bramber South 349 Portion Re      | Barberton Mines Pty Ltd                              |  |
| Bramber Central 348 Portion Re    | Barberton Mines Pty Ltd                              |  |
| Worrall 352 Portion Re            | Provincial Government Of Mpumalanga                  |  |
| Adjac                             | ent Farm properties                                  |  |
| Farm                              | Name/Company   |  |
| The Thorns 347 Portion Re         |  |  |
| Hallsbury 350 Portion Re          | Nyalunga Judas Jabulane                              |  |
| Matambule 586 Portion Re          |  |  |
| Mimosa 557 Portion 1              | Macaulay Desiree Jennifer                            |  |
| Mimosa 557 Portion Re             | National Government Of South Africa                  |  |
| Bramber East 314 Portion Re       | Barberton Mines Pty Ltd (surface agreement at least) |  |
| Bickenhall 346 Portion Re         | Provincial Government Of Mpumalanga                  |  |
| Bickenhall 346 Portion 2          |  |  |
| Barbeton Townloads 369 Portion 4  |  |  |
| Barbeton Townloads 369 Portion 14 |  |  |
| Verulam 351 Portion 1             | Umjindi Municipality (Mbombela Local Municipality)   |  |
| Verulam 351 Portion 3             |  |  |
| Hayward 310 Portion Re            | Provincial Government Of Mpumalanga                  |  |
| Mandarin 558 Portion Re           | Provincial Government Of Mpumalanga                  |  |
| Moepel 559 Portion Re             | Provincial Government Of Mpumalanga                  |  |
| Flamboyant 560 Portion Re         | Provincial Government Of Mpumalanga                  |  |
| Saffran 562 Portion Re            |  |  |
| Tinto 303 Portion Re              | Tinto 300 Beleggings CC                              |  |
| Kameelspoor 563 Portion Re        | Provincial Government Of Mpumalanga                  |  |
| Camelot 320 Portion Re            | National Government Of South Africa                  |  |
| Eureka 294 Portion Re             | Buscari Trust  |  |
| Crystal Stream 323 Portion Re     | Lomshiyo Trust                                       |  |
| Lancaster 359 Portion 1           | Lomshiyo Trust                                       |  |
| Colombo 365 Portion Re            | Lomshiyo Trust                                       |  |
| Covington 345 Portion RE          |  |  |
| Wonder Scheur 362 Portion Re      | Way Prop Two Pty Ltd                                 |  |
| Dycedale 368 Portion Re           | Simply See Pty Ltd                                   |  |
| Dycedale 368 Portion 2            | Welloch Boerdery Pty Ltd                             |  |
| I&AP                              | E.S. Chibi Simelane / Verulous Daycare centre        |  |

| I O A D            | Emmanual Chiridalis / Marulassa Davidassa Caralas   |
|--------------------|---|
| I&AP               | Emmanuel Chiridzlu / Verulous Daycare Centre  |
| I&AP               | Sibongile Hlophe / Vegetable Garden   |
| I&AP               | Hlabande Zandile / Vegetable Garden   |
| I&AP               | Thulisile Phin / Vegetable Garden   |
| I&AP               | Cebisile Ndwandwe / CDW Coqta   |
| I&AP               | Innocnt Godi / Vegetable Garden   |
| I&AP               | Muzi Nkosi / Knowledge of Success Sinqobile youth centre  |
| 1007 (1            | Malibongwe Cele / Knowledge of Success  |
| I&AP               | Singobile youth centre  |
| I&AP               | Aluna Phiri / Vegetable Garden  |
| I&AP               | Mercy Ngomane / Vegetable garden  |
| I&AP               | Aventina Bhila / Vegetable Garden   |
| I&AP               | S Mntungwa / Verlum H.B.C   |
| I&AP               | H Maseko / Qinani Bogogo  |
| I&AP               | Phindile Mandlazi / Fairview (SGB)  |
| I&AP               | Jabu Chauque / LLO Sewue  |
| I&AP               | Issie Khoza / D Secretary Ward Committee  |
| I&AP               | Bonsani Mhlongo / Cogta   |
| I&AP               | Liberty Shongile / City of MBM municipality   |
| Bramber            | Rory Macauley / Brambers  |
| Bramber Farm 31354 | D.B. Bothma   |
| Bramber            | Michael   |
| I&AP               | Malunga   |
| I&AP               | Evelyn / Verulam Sawmills   |
| I&AP               | Nicholas  |
| I&AP               | Nico and Gerhard Wessels / SPCA   |
| I&AP               | Mokone Pillsa   |
|                    | Additional I&APs  |
| Farm               | Name/Company  |
| I&AP               | Bickenhall 346 JU - Remaining Extent  |
| I&AP               | Camelot 320 JU 2, Camelot 320 JU 3  |
| I&AP               | Eureka 294 JU RE  |
| I&AP               | Eureka 294 JU RE  |
| I&AP               | Bon Accord Stock Farm 282 JU Portion 4  |
| I&AP               | Camelot 320 JU 1  |
| I&AP               | Colombo 365 JU RE, Lancaster 359 JU Portion 3,<br>Lancaster 359 JU Portion 1, Crystal Stream 323 JU<br>Portion RE |
| I&AP               | It's a Good Time (Pty) Ltd  |
| I&AP               | Dycedale 368 JU - Portion 25  |
| I&AP               | Hayward 310 JU - Remaining Extent   |
| I&AP               | Mimosa 557 JU - Remaining Extent  |
| I&AP               | Camelot 320 JU RE   |
| I&AP               | Camelot 321 JU Portion RE (320 on )   |
| I&AP               | Saffraan 562 JU - Remaining Extent  |
|                    | 1 Januari 302 30 Remaining Extern   |

|      | 1   |
|------|---|
| I&AP | Convington 345 JU Portion RE  |
| I&AP | Gara 322 JU Portion RE  |
| I&AP | Kameelspoor 563 JU - Remaining Extent   |
| I&AP | Flamboyant 560 JU - Remaining Extent  |
| I&AP | Moepel 559 JU RE  |
| I&AP | Mandarin 558 JU RE  |
| I&AP | Bramber East 314 JU RE  |
| I&AP | Worrall 352 JU RE   |
| I&AP | Tinto 303 JU Portion RE (300 JU on )  |
| I&AP | Wonderscheur 362 JU RE  |
| I&AP | Dycedale 368 JU - Portion 2   |
| I&AP | Unalienated State Land 0 Portion RE   |
| I&AP | Dycedale 368JU Portion 12   |
| I&AP | Dycedale 368JU Portion 19   |
| I&AP | Dycedale 368JU Portion 10   |
| I&AP | Dublin 302JU Portion 4  |
| I&AP | Dycedale 368JU Portion 16, Dycedale 368JU Portion 7   |
| I&AP | Lancaster 359JU RE  |
| I&AP | Dublin 302JU RE   |
| I&AP | Raasblaar 561JU RE  |
| I&AP | Hillside 459JT  |
| I&AP | Dycedale 368JU Portion 13, Dycedale 368JU Portion 26, Dycedale 368JU Portion 9, Dycedale 368JU Portion 11, Dycedale 368JU Portion 14, Dycedale 368JU Portion 15, Dycedale 368JU Portion 17, Dycedale 368JU Portion 20, Dycedale 368JU Portion 21, Dycedale 368JU Portion 22, Dycedale 368JU Portion 23, Dycedale 368JU Portion 24, Dycedale 368JU Portion 0 |
| I&AP | Hayward 310JU Portion 1   |
| I&AP | Wonder Scheur 362 JU, Twello 373JU Portion 2,<br>Twello 373JU Portion 3   |

| Authorities      |                                   |                     |
|------------------|-----------------------------------|---------------------|
| Interested Party | Authority                         | Name                |
|                  | Department of Environmental       |                     |
| Authorities      | Affairs                           | Brendon Mashabane   |
|                  | Mpumalanga Tourism and Parks      |                     |
| Authorities      | Agency- Scientific Services Units | Dr Marisa Coetzee   |
|                  | Mpumalanga Tourism and Parks      |                     |
|                  | Agency- Control Scientist:        |                     |
| Authorities      | Biodiversity Planning             | Dr Mervyn Lötter    |
|                  | Mpumalanga Department of          |                     |
|                  | Economic Development,             |                     |
|                  | Environment and Tourism- Head     |                     |
| Authorities      | of Department                     | Dr Vusanani Dlamini |
| Authorities      | Inkomati- Usuthu CMA-             | Fairbridge Mnisi    |

| Authorities   | Inkomati- Usuthu CMA-   | Golden Mthembi       |
|---------------|---|----------------------|
|               |   | Head Office          |
| Authorities   | Department of Mineral Resources                               | пеаа Опісе           |
|               | Mpumalanga Tourism and Parks Agency- Head of Scientific       |                      |
| Authorities   | Services and Conservation                                     | Johan Eksteen        |
| Aumonnes      | City of Mbombela Local  | JOHAN EKSTEEN        |
| Authorities   | Municipality  | Khethiwe Malaza      |
| Authorities   | Transnet- Barbeton/Nelspruit                                  | Mr Bonginkosi        |
| Admonics      | Mpumalanga Tourism and Parks                                  | 7VII BOTTGITIKOSI    |
| Authorities   | Agency- Protected areas unit                                  | Mr Dan Mahlangu      |
| 7.01110111103 | Mpumalanga Tourism and Parks                                  | 7711 Barrivianiange  |
|               | Agency- Barberton Nature                                      |                      |
| Authorities   | Reserve Contact Person  | Mr Francois Du Toit  |
|               | Mpumalanga Tourism and Parks                                  |                      |
|               | Agency- Tourism and   |                      |
| Authorities   | Development Unit  | Mr Justus Mohlala    |
|               | Mpumalanga Tourism and Parks                                  |                      |
| Authorities   | Agency  | Mr Louis Loock       |
|               | Mpumalanga Department of                                      |                      |
|               | Economic Development,   |                      |
|               | Environment and Tourism-                                      |                      |
| Authorities   | Member of Executive Council                                   | Mr Norman Mokoena    |
|               | Mpumalanga Tourism and Parks                                  |                      |
|               | Agency- Chief Biodiversity                                    |                      |
| Authorities   | Conservation Officer  | Mr Reuben Ngwenya    |
|               | Mpumalanga Department of                                      |                      |
|               | Economic Development,   |                      |
|               | Environment and Tourism-                                      |                      |
|               | Environmental serices,  |                      |
|               | environmental awareness and                                   |                      |
|               | education, environmental impact management, pollution & waste | Mr S Maluleka        |
|               | management service,   | Dr A Lange           |
|               | Environmental Policy, Planning                                | Mr S Hlatshwayo      |
|               | and Co-ordination, Environmental                              | Mr M Mahlalela       |
|               | Compliance, Management and                                    | Mr G Cowden          |
| Authorities   | Enforcement   | Ms P Ntuli           |
| -             | Ehlanzeni District Municipality-                              |                      |
| Authorities   | Environmental Centres, Barbeton                               | Mr T Booyens         |
|               | South African Heritage Resources                              |                      |
| Authorities   | Agency  | Ms Heidi Weldon      |
| Authorities   | Ward Councillor- Ward 43                                      | Philip Minnaar       |
|               | Mpumalanga Tourism and Parks                                  |                      |
| Authorities   | Agency- Social Ecology Unit                                   | Ms Marinda Marais    |
|               | South African Heritage Resources                              |                      |
| Authorities   | Agency  | Ms Nkosazana Machete |
|               | Barberton Tourism and Biodiversity                            |                      |
|               | Corridor (BATOBIC)- Barberton                                 |                      |
| Authorities   | Geotrail  | Ms Rekwele Mmatli    |
|               | Department of Environmental                                   |                      |
|               | Affairs- Contact person on                                    |                      |
| Authorities   | UNESCO Nomination   | Ms Thumeka Ntloko    |
|               | Ehlanzeni District Municipality-                              |                      |
|               | Environmental Centres, District                               |                      |
| Authorities   | manager   | Ms Z Hlaka           |

|   |   | Regional Manager:    |
|---|---|----------------------|
| Authorities Department of Mineral Resources |   | Mpumalanga           |
| Authorities                                 | Ehlanzeni District Municipality                               | Rirhandzu Ntusi      |
|   | Department of Water Affairs and                               |                      |
| Authorities                                 | Sanitation  | Wendy Tshawe         |
|   | Department of Agriculture,                                    |                      |
| Authorities                                 | Forestry and Fisheries  | Zinzile Mtotywa      |
| Authorities                                 | Ehlanzeni District Municipality                               | AA F C Cilo a a a    |
| Authorities                                 | (Municipal Manager)  Mbombela Local Municipality              | Mr. F S Siboza       |
| Aumonnes                                    | (Land Use Management)   | Ben Steyn            |
| Authorities                                 | Mbombela Local Municipality                                   |                      |
| 7.01110111103                               | (Planning and Development)                                    | Dumisani Mabuza      |
| Authorities                                 | Mpumalanga Tourism and Parks                                  | Error and Des Tail   |
|   | Agency  | Francois Du Toit     |
| Authorities                                 | Mpumalanga Tourism and Parks                                  | Frans Krige          |
|   | Agency  | Trans Rige           |
| Authorities                                 | Department of Trade and Industry                              | Gerhard Calitz       |
| Authorities                                 | Mbombela Local Municipality                                   | HL Shongwe           |
|   | Ward 43   |                      |
| Authorities                                 | Department of Tourism   | Jay Singh            |
| Authorities                                 | Mbombela Local Municipality (SDF)                             | Jeff Nkuna           |
| Authorities                                 | Department of Agriculture, Forestry and Fisheries             | Joe Kgobokoe         |
| Authorities                                 | Mpumalanga Tourism and Parks Agency                           | Johan Eksteen        |
| Authorities                                 | Department of Energy  | Kate Dire            |
| Authorities                                 | Department of Rural   |                      |
|   | Development &Land Reform                                      | Lucas Mufumadi       |
| Authorities                                 | Department of Water Affairs                                   | Lunghile Mthombeni   |
| Authorities                                 | Department of Transport                                       | Lydia Forssman       |
| Authorities                                 | Department of Public Works                                    | Mbuyi Dondashe       |
| Authorities                                 | National Department of Human                                  |                      |
|   | Settlements   | Moipone Ngoasheng    |
| Authorities                                 | Department of Water and                                       |                      |
|   | Sanitation  | Mr Masala Mulaudzi   |
| Authorities                                 | Mpumalanga Economic   | Mr P Maseko          |
| A. Ho oritios                               | Development and Tourism                                       |                      |
| Authorities                                 | Department of Agriculture, Forestry and Fisheries (DAFF)      | Mr Siyabulela Kobese |
| Authorities                                 | Department of Water and                                       |                      |
| , (01110111103                              | Sanitation  | N. Kgabileng         |
| Authorities                                 | Mbombela Local Municipality                                   |                      |
|   | (Municipal Manager)   | Neil Diamond         |
| Authorities                                 | Chief Director: Land Restitution Support Mpumalanga Province) | Sam Nkosi            |
| Authorities                                 | Department of Environmental Affairs                           | Thizwikoni Ramavhona |
| Authorities                                 | Department of Water and Sanitation                            | Thya Pather          |

| Fairview Old I&AP Database  |                                       |
|-----------------------------|---------------------------------------|
| Name                        | Designation                           |
| Sonia Chipu                 | Environmental                         |
| Betty Mnguni                | DWAF Will come                        |
| Sandile Vilakazi            | MDALA phone beset                     |
| Hannes Botha                |                                       |
| Moses Mabuza                | Neighbouring Property Owner           |
| Rory Macaulay               | Neighbouring Property Owner           |
| Jannie de Wit               | Greenstone                            |
| Umjindi Municipality        |                                       |
| Councillor Meshach Nsimbini | Verulam Township                      |
| Pieter Briel                | SAPPI SHE Officer                     |
| Bongani Methiwiane          | Barberton Local Council,              |
|                             | Town Manager                          |
| Mike Menge                  | National Agriculture                  |
| Astrid                      | Info Bureau, Tourism                  |
|                             |                                       |
| Tony Ferrar                 | Barberton (Umjindi) Environmental     |
|                             | Committee/ WESSA                      |
| Andrew Nuns                 | Rate Payers Association               |
| Marjorie Nuns               | Umjindi Environmental Committee       |
| John Bunning                | Barberton Bird Club                   |
| M. Harper                   | Barberton Gold                        |
| Dave Mourant                | Bird Club/ Barberton Toursim Comittee |

# ANNEXURE B: BACKGROUND INFORMATION DOCUMENT



# PAN AFRICAN RESOURCES PLC: BARBERTON MINES PTY LTD APPLICATION FOR ENVIRONMENTAL AUTHORISATIONS for FAIRVIEW GOLD MINE: MP/30/5/1/2/2/191MR

### 1. INTRODUCTION

Barberton Mines (Pty) Ltd (BML), which forms part of Pan African Resources PLC, owns and operates the Fairview Mine, New Consort Mine, Sheba Mine and Barberton Tailings Retreatment Plant (BTRP) near the town of Barberton, Mpumalanga.

Mining in the Fairview area commenced in the 1880's. Today, Fairview Mine has an approved Mining Right (Reference Number 30/5/1/2/3/2/1/191) and Environmental Management Plan (EMP) in terms of the Mineral and Petroleum Resources Development Act (No. 28 of 2002) (MPRDA) among other authorizations.

The Mining operation comprises underground gold mining, as well as surface reclamation of Tailings material. Ore is transported to the processing facilities at the Main Infrastructure Area where it is crushed and milled, before undergoing flotation to produce gold concentrate. Concentrate is further processed at the Biox Plant and the CIL Plant. Final concentrate is smelted on site to produce gold bullion.

Flotation Tailings and CIL Tailings are produced by these processes, Tailings are currently being deposited on a Tailings Storage Facility (TSF) known as the New Bramber Tailings Dam, or BTRP TSF.

The New Bramber TSF does not have sufficient capacity to facilitate ongoing production. BML therefore proposes to construct a new TSF at the site of the original Bramber TSF which has since been reclaimed. The new TSF will be referred to as the Fairview TSF and will be adjoining the current New Bramber TSF.

Historical gold mining in the area has resulted in several waste dumps throughout the area. Many of these dumps still contain high percentages of gold.

In addition to the proposed construction of the new Fairview TSF, BML wishes to obtain the necessary authorizations to recover material from these historic dumps via mechanical methods and re-process the material in the existing Fairview Plant. This reprocessing has two main objectives, namely gold recovery from the deposits and environmental cleanup.

### 2. SUMMARY OF LEGAL REQUIREMENTS

To implement the proposed projects, BML is required to apply for authorisation in terms of the following mining and environmental legislation:

- Amendment of the existing EMP in terms of Section 102 of the MPRDA;
- Environmental Authorisation for Listed Activities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA);
- A Waste Management License (WML) in terms of the National Environmental Management Waste Act, 2008 (Act No 59 of 2008) (NEMWA);
- Destruction permits for heritage resources in terms of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA);
- Relocation Permits for Protected Plant Species in terms of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) (NEMBA); and
- An Integrated Water Use License (IWUL) in terms of the National Water Act, 1998 (Act No. 36 of 1998) (NWA).

### 3. PURPOSE OF THIS DOCUMENT

Cabanga Environmental has been appointed as the independent Environmental Assessment Practitioner (EAP) to undertake an Environmental Impact Assessment (EIA) in terms of the proposed Project.

The Recipients of this document have been identified as potential Interested and Affected Parties (I&AP) in terms of the proposed Projects. This document (the Background Information Document or "BID") has been compiled to provide I&APs with information on the proposed Project and the environmental application processes.

The Reader is hereby invited to participate in the EIA process freely and submit any questions or information you feel may contribute to the process to us. All comments received will be recorded and addressed as part of the EIA process.

Please complete the attached questionnaire and return to us on Fax: 011 794 6946 or lelani@cabangaenvironmental.co.za to register as an I&AP. Alternatively call us on 011 794 7534.



### 4. PROJECT SCOPE

This Application relates to three interrelated aspects:

- Application for Amendment of the existing Mining Right MP30/5/1/2/2/191MR, to
  - o incorporate the Fairview Surface rights areas where the existing TSFs are located and ensure the activities occurring at the Fairview Mine are all integrated under one Right, and managed under one EMP;
  - accommodate the construction of the new Fairview TSF, at the site of the reclaimed Bramber TSF; and
  - accommodate the recovery of material from historic dumps and re-processing of this material at the existing Fairview processing plants.
- Application for Environmental Authorisation for new Listed Activities associated with the new Fairview TSF, and the proposed reclamation of the historic dumps.
- Application for a WML for the new TSF and reclamation of the historic dumps.

A Scoping and Environmental Impact Assessment (EIA) Process is relevant to the application.

The EIA Process will focus on the proposed activities associated with the Project. While the existing impacts from current and past mining activities on the site will be informative of the baseline conditions of the site and the cumulative nature of some of the potential impacts, the existing impacts of the Fairview Mine will not be the focus of the study. The EMP will be updated as part of this process to ensure that Fairview Mine can be managed under one, consolidated EMP.

**Description of the proposed new TSF:** Continued gold production at Fairview Mine means that the BTRP TSF will soon reach capacity. BML intends to construct a new TSF at the footprint of the Old Bramber TSF (which is currently being reclaimed as part of the BTRP), adjoining the current BRTP/New Bramber TSF, to accommodate future tailings deposition. It is further proposed to earmark the footprints of the Moon TSF, Harper North and South TSFs (being reclaimed or planned to be reclaimed) for future TSF development.

The design of the proposed new TSF is underway but not yet concluded. The proposed new TSF footprint will not exceed 30 Ha. Deposition rate onto the TSF will be 100,000 tons per month. The final height of the facility will not exceed 35 meters from the lowest ground level. The design life of the facility is approximately 5 years.

Description of proposed reclamation of material from historic dumps: Ten (10) historic waste dumps have been identified to date within the Fairview MRA, that BML wishes to recover. These dumps include waste rock and tailings material that resulted from past mining and processing activities (over the past 100 years). None of these dumps were established by the current Holder of the Mining Right (BML), and none of these dumps are licensed in terms of the current legislation (at the time they were established, no legislation requiring the licensing of these dumps existed). Accurate information about the exact dates these dumps were established is not available.

BML proposes to recover this material using mechanical methods, and transport the material to their existing processing facilities via trucks. Existing roads and tracks will be used to access the dumps, though these will require upgrades.

### 5. PURPOSE OF THE EIA

All South African's have a Constitutional Right to an Environment that is not harmful to our health or well-being and to have the environment protected for the benefit of present and future generations.

The EIA process is a legal requirement in terms of NEMA, to ensure that pollution and ecological degradation that may be caused by a development proposal are assessed and understood prior to a development taking place. Understanding potential impacts enables developers to implement appropriate measures to avoid or reduce environmental impacts associated with a proposed development. Such an approach is followed in the interest of ensuring ecologically sustainable development and use of natural resources, while promoting justifiable economic and development, in line with the Constitution.

The EIA Process involves two essential phases; first, a Scoping exercise is undertaken which aims to identify potential issues, impacts and concerns surrounding a development proposal. This enables the EAP, through a consultative process with the Authorities and I&APs to define the necessary studies and assessment processes to be undertaken during the EIA phase.

The EIA phase (phase 2) further defines the potential impacts that could arise from the implementation of a Project, and attempts to define the significance of each impact. The significance of an impact directly affects the level of management that a project proponent must implement to avoid or reduce negative environmental impacts.



The ultimate decision on an application in terms of the MPRDA, NEMA and NEM:WA rests with the Competent Authority (in this case the DMR). The DMR will take all relevant project information, specialist assessments, the EIA, the EMP and public comments and inputs into consideration in making their decision regarding the application. The submission of an application and undertaking of the Scoping & EIA Process does not guarantee that authorisation will be granted.

# 6. WATER USE LICENSE APPLICATION

Fairview Mine has an existing approved Water Use License (WUL) issued by the Inkomati-Usutu Catchment Management Agency (IUCMA), Reference no: 04/X23F/ABEFGJ/4725.

No person is allowed to engage in a water use activity unless permissible under section 22 of the National Water Act (Act 36 of 1998).

With reference to the proposed Project, ESCON Consulting (Pty) Ltd has been appointed to apply for the Mine's WUL to include both existing and proposed water uses.

### 7. APPLICATION PROCESS

The MPRDA and its Regulations is the predominant legislation dealing with the acquisition of rights to search for, extract and process mineral resources in South Africa. The MPRDA holds that mineral resources in South Africa belong to the nation and that the State is the custodian thereof.

Section 102 of the MPRDA states that the Holder of a Right may not change their authorised activities without the consent of the Minister of Mineral Resources. Barberton Mines has to apply for consent to amend their EMP as discussed herein.

The undertaking of Listed Activities in terms of the EIA Regulations promulgated in terms of the NEMA requires Environmental Authorisation to be obtained. The Project is associated with a number of Listed Activities, and the Scoping EIA Process as described in

Regulations 21 to 24 of the EIA Regulations, 2014 (as amended) must be undertaken.

The NEMWA similarly lists in its regulations activities which require authorisation prior to being undertaken. The application process in terms of NEMWA is integrated to the MPRDA and NEMA processes. The Department of Mineral Resources (DMR) is the competent authority in respect of the applications under the MPRDA, NEMA and NEMWA.

The NWA requires any person who wishes to undertake a water use (as identified in the Act) to obtain authorisation from the Department of Water and Sanitation (DWS). This application process is being undertaken by ESCON Consulting (Pty) Ltd. They may be contacted directly on the details provided. Comments pertaining to the Water Use License Application (WULA) received by Cabanga will be provided to ESCON and addressed in the EIA as far as possible.

The relevant application processes are illustrated on the following page.

For queries and comments related to the **WULA** please contact:

Contact: Mr Phumudzo Morris Mavhunga Company: ESCON Consulting (Pty) Ltd

E-mail: morris@escon.org.za

**Cell**: 072 763 0725 081 340 3086

For queries and comments related to the **Scoping and EIA Process**, and/or any other queries, please contact:

Contact: Lelani Claassen

Company: Cabanga Environmental

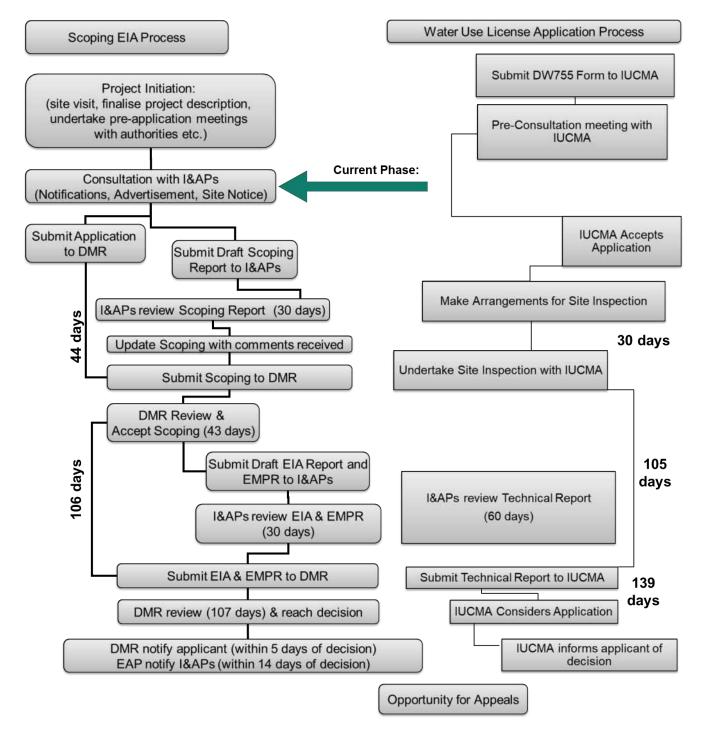
E-Mail: lelani@cabangaenvironmental.co.za

**Tel**: 011 794 7534

The Reader is invited to participate in the Application process, by registering as an I&AP. As a Registered I&AP you will be kept informed of the Application processes, invited to attend public meetings and review draft reports compiled in terms of the applications. Furthermore, all comments that registered I&APs submit in terms of the Applications will be included in the relevant reports, and addressed throughout the process.

TO REGISTER: please provide us with your comments and contact details as soon as possible. The Draft Scoping Report is being prepared and will be made available for public comment by 28 October 2019. Details of the availability of the Report will be communicated to Registered I&APs. You are welcome to register and provide your comments at any time throughout the application process.







### 8. PROJECT ENVIRONMENTAL CONTEXT

The mines that make up Barberton Mines Limited (BML) (Fairview, New Consort and Sheba) today started operations more than 100 years ago.

Almost the entirety of the Fairview, New Consort and Sheba Mining Right Areas fall within the Barberton Nature Reserve (BNR) as identified in the South Africa Protected Areas Database (SAPAD) (see Map below).

The Fairview Mining Right Area (MRA) also borders on the Barberton-Makhonjwa Mountains World Heritage Site (WHS) which was included in the List of World Heritage Sites in 2018.

Over the past 100 years of these Mine's operations, the remaining life of each has often been forecast as being only six to 10 years. The mines have consistently defied these estimates in the past and have continued to operate with new ore bodies and extensions adding to resources and reserves through proactive exploration techniques, ensuring a sustainable employment sector for the communities in and around the Barberton district.

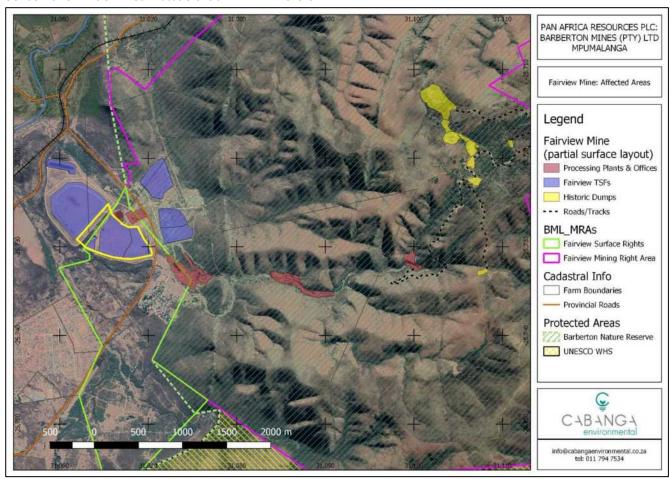
The nature of mining activities and the nature of conservation activities associated with Nature

Reserves are not, in general terms, compatible, although, Pan African Resources PLC ascribes to all environmental laws and best practices to ensure a sustainable environment and habitat preservation or re-instatement.

Considering the existence of mining in the region from the 1880's, and the proclamation in terms of the Mpumalanga Nature Conservation Act of the BNR in 2014, the co-existence of these seemingly opposing land uses is not new to the area.

The proposed new TSF site is located at the footprint of the original Bramber TSF and Bramber TSF extension. The original Bramber TSF has been reclaimed and the site is regarded as disturbed.

The dumps that are targeted for reclamation are within the nature reserve and also not in pristine ecological environments, though historic abandonment of these dumps has allowed vegetation to re-establish in these areas. Ecological and Soil studies to be undertaken as part of the EIA will shed more light on the ecological integrity of the sites, and the potential impacts of the proposed reclamation.





### 9. POTENTIAL ENVIRONMENTAL IMPACTS AND SPECIALIST ASSESSMENTS

The following specialist studies will be undertaken and will form part of the EIA process:

| Potential aspect the project could impact upon | Specialist who will undertake the impact assessment        |
|--|--|
| Groundwater                                    | Gradient Groundwater Consulting                            |
| Surface Water                                  | SD Hydrological Services, and SLR Consulting (engineering) |
| Terrestrial Biodiversity                       | Scientific Terrestrial Services                            |
| Aquatic Ecology and Wetlands                   | Scientific Aquatic Services                                |
| Soils  | Digital Soils Africa, with Cabanga Environmental           |
| Heritage and Palaeontology                     | Archaetnos Prof A van Volenhoven, and Prof M Bamford       |
| Air Quality                                    | Rayten Engineering Solutions                               |

In addition to the Specialist studies identified above, Cabanga Environmental will complete a detailed closure and rehabilitation plan for the proposed Project, including a calculation of the financial provision that will be required for rehabilitation of affected areas.

### 10. PUBLIC PARTICIPATION PROCESS

Public involvement is an essential component of the application process. It addresses the right of I&APs to be informed of the proposed activities and to be involved in decisions that may affect them. It also affords the EAP an opportunity to assess and address the issues and concerns raised by I&APs thus allowing the EAP to assess all the potential impacts of the proposed project.

As a Registered I&AP you will be kept informed of the Scoping & EIA Process, invited to attend public meetings and review draft reports compiled in terms of the application. Furthermore, all comments that registered I&APs submit in terms of the Application will be included in the relevant reports, and addressed throughout the process.

### **HOW TO REGISTER**

Please register as an I&AP to receive information on the document availability as well as the venue, date and time of the public participation meetings.

Register by completing the attached form and returning it to Cabanga Environmental at the contact details provided, or by submitting written comments in any other format to Cabanga Environmental. Please ensure that Cabanga Environmental has the required contact details so that the communication of all information regarding the EIA process can be efficient.



Contact Person: Lelani Claassen

Tel: 011 794 7534 Fax: 011 794 6946

<u>lelani@cabangaenvironmental.co.za</u> <u>www.cabangaenvironmental.co.za</u>

For queries and comments related to the **WULA** please contact:

Contact: Mr Phumudzo Morris Mavhunga Company: ESCON Consulting (Pty) Ltd

E-mail: morris@escon.org.za

**Cell**: 072 763 0725 or 081 340 3086



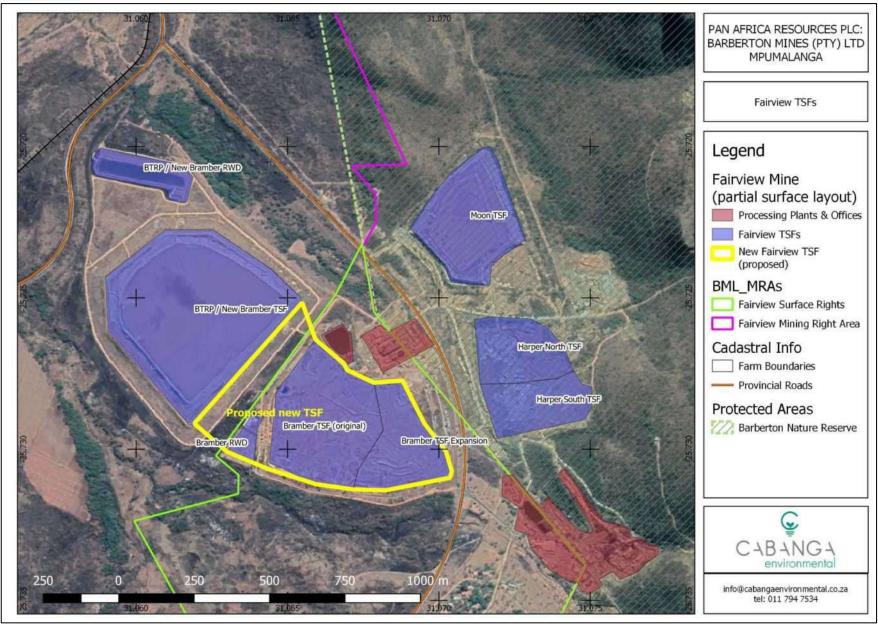


Figure 1: Location of TSFs at Fairview MIne

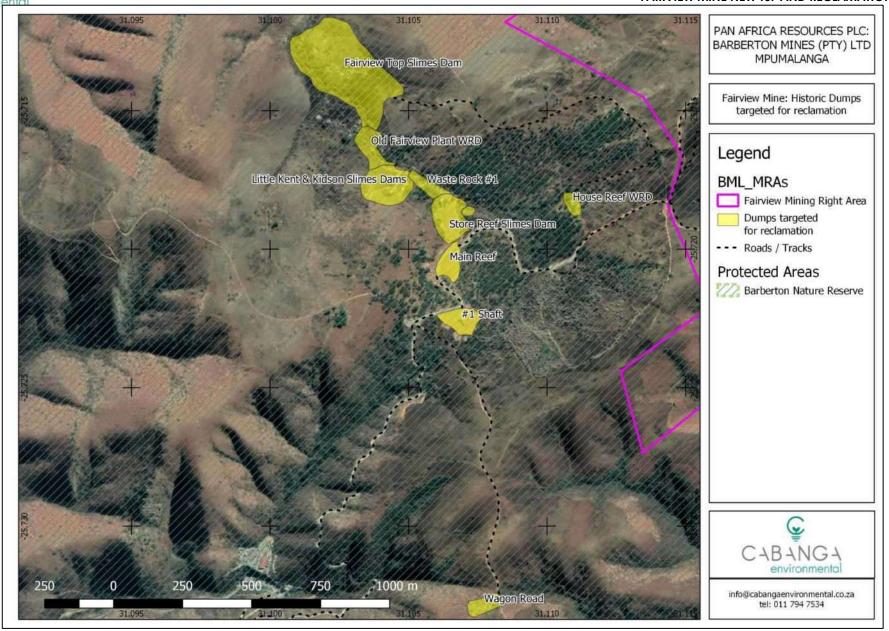


Figure 2: Location of historic dumps targeted for reclamation at Fairview Mine

# PUBLIC PARTICIPATION QUESTIONNAIRE: FAIRVIEW MINE - NEW TSF AND DUMP RECLAMATION

To register as an I&AP, please complete and return to Cabanga via e-mail, fax or post:



lelani@cabangaenvironmental.co.za; Fax: (011) 794 6946

Postnet Suite 470, P/Bag X3, Northriding, 2162

Alternatively, please register on <a href="www.cabangaenvironmental.co.za">www.cabangaenvironmental.co.za</a> click on "Public Participation"

| Name:  |   | Surname:     |                       |
|--|---|--------------|-----------------------|
| Telephone No.:   |   | Fax No.:     |                       |
| Post:  |   |              |                       |
| E-mail:  |   |              |                       |
| How would you p  | refer to be contacted:  | □E-mail □Fax | □Post □Telephone □SMS |
| Are you an imme  | diately affected or adjacent  | □Yes □No     |                       |
| If no, what is you   | interest in the project?  |              |                       |
| -  | cate your farm / property<br>details on the current land use.                         |              |                       |
| or refusal of this p   | vested interest in the approval project? If yes, please ee to attach separate pages). | □Yes □No     |                       |
| Do you feel that the proposed activities will impact on you and / or your socio-economic conditions? How? (feel free to attach pages).   |   | □Yes □No     |                       |
| Are you aware of any additional impacts not yet identified? (feel free to attach pages).   |   |              |                       |
| Are you aware of any sensitive areas that should be avoided (i.e. graves, cultural sites, endangered species, special environmental features or areas etc.) (feel free to attach separate pages) |   |              |                       |
| = =  | alternative mitigation pose? (feel free to attach                                     |              |                       |
| Do you know of any other persons, organisations or parties that should be notified?  Please provide contact details.   |   | □Yes □No     |                       |
| Do you have any additional comments, concerns or queries? (feel free to attach pages).   |   |              |                       |



# I-PAN AFRICAN RESOURCES PLC: BARBERTON MINES PTY LTD KUFAKA SICELO SEKUGUNYATWA KWESIMONDZAWO IMAYINI YEGOLIDE I-FAIRVIEW: MP/30/5/1/2/2/191MR

### 1. SINGENISO

I-Barberton Mines (Pty) Ltd, leyenta incenye ye Pan African Resources PLC, ingumnikati kantsi ibuye isebentise Timayini I-Fairview, i-New Consort ne-Sheba kanye ne Tailings Retreatment Plant (BTRP), dvutane nelidolobha i-Barberton, eMpumalanga.

Kusebenta kwemayini endzaweni yase-Fairview kwacala ngabo 1880. Namuhla, Imayini i-Fairview seyinelilungelo lekumayina lelisemtsetfweni (Inombolo yeReferensi 30/5/1/2/3/2/1/191) kanye Neluhlelo Lekulawula Simondzawo (i-EMP) ngekweMtsetfo Wekutfutfukisa Tinsita temaMinerali nePethroliyamu( Umtsetfo 28 wanga 2002) (i-MPRDA) kuleminye legunyatiwe.

Kusebenta kwemayini kufaka kugubha igolide, kanye kumba phansi imfucuta letheyilwako. Insimbi i-ore iyiswa iyopolishwa eNdzaweni lesakhiwonchanti lesikhulu lapho igaywa ibuye isilwe khona, ngembi kwekusefwa pheceleti i-flotation kukhicita Isanti yegolide. Lesanti lemnyama iphindze icutjungulwe kuplanti i-Biox nakuplanti i-CIL. Isanti yekugcina iyancibilikiswa endzaweni kukhicita ibhuliyoni yegolide.

Ema-Flotation Tailings nema- CIL Tailing akhicitwa nguletinchubo, ema, Tailing kwanyalo abekwa Endzaweni Yekugcina Ema-Tailing (i-TSF) leyatiwa njenge Bramber Tailings Dam lensha, noma i- BTRP TSF.

I- Bramber TSF lensha ayinawo emandla lenele ekuchuba lomkhicito lochubekako. I-BML ibese iphakamisa kwakha i-TSF lensha endzaweni ye- Bramber TSF mbamba lesolo yatsatfwa. I-TSF lensha itawubitwa njenge- Fairview TSF kantsi itawube ihlangana ne-Bramber TSF lensha.

Kumba igolide ngekwemlandvo endzaweni kube nemphumela wekulahlwa kwemfucuta kuyo yonkhe lendzawo. Migodzi leminyenti isenemaphesenti lasetulu egolide.

Kungeta kulesiphakamiso sekwakha i- Fairview TSF lensha, i-BML ifisa kutfola ligunya lelifanele kutfola umkhicito kulemigodzi yemlandvo ngetindlela temakhemikhali kanye nekucubungula kabusha umkhicito kuPlanti ye-Fairview lokhona. Lokucubungula kabusha kunetinhloso letimbili letibalulekile, kk,igolide letfolwe kulokulahliwe kanye nekuhlanta simondzawo.

### 2. SIBUTSETELO SETIDZINGO TEMTSETFO

Kusebentisa imiklamo lephakanyisiwe, i-BML kudzingeke kutsi ifake sicelo seligunya ngekwemtsetfosimiso lolandzelako wemayini kanye nesimondzawo:

- Kuchitjiyelwa kwe-EMP lokhona ngekweSigaba 102 se-MPRDA;
- Ligunya Lesimondzawo leMisebenti lebhalisiwe ngekweMtsetfo Wekulawula Simondzawo Wavelonkhe, 1998 (Umtsetfo Namba. 107 wanga 1998) (I-NEMA);
- Imvumo Yekulawula Imfucuta (i-WML) ngekweMtsetfo Wemfucuta Wekulawula Simondzawo Wavelonkhe, 2008 (Umtsetfo Namba 59 wanga 2008) (NEMWA);
- Tincwadzi tekudzilita imitfombo lemagugu ngekweMtsetfo Wemitfombo Yemagugu Wavelonkhe, 1999 (Umtsetfo Namba 25 wanga 1999) (NHRA);
- Tincwadzi tekulungisa lenye indzawo Tetihlahla Letivikelekile ngekweKulawulwa Kwesimondzawo Savelonkhe: Umtsetfo Walokuphilako i-Biodiversity, 2004 (Umtsetfo Namba. 10 wanga 2004) (NEMBA);ne
- Imvumo Lehlanganisiwe Yekusetjentiswa Kwemanti, 1998 (Umtsetfo Namba.36 wanga 1998) (NWA).

### 3. INHLOSO YALEDOKHUMENTI

Cabanga Environmental iye yakhetfwa njengaSolwati Wetekuhlola Simondzawo Lotimele (i-EAP) kusebenta Ekuhloleni Umtselela Wesimondzawo (i-EIA) ngekwemklamo lophakanyisiwe. Kuhlola (i-EIA) ngekweMklamo Lophakanyisiwe. Bamukeli baledokhumenti sebabonwe njengalabanenshisakalo nalabatsintsekako (I&AP) ngekwe-Royal Sheba Project lephakanyisiwe. Ledokhumenti (Idokhumenti leniketa lwatiso lolusisusa) noma i- "BID") ihlanganiselwe kuniketa i- I&APs ngelwatiso lolungalomklamo lophakanvisiwe kanye netinchubo tesicelo sesimondzawo.

Loyifundzako uyamenywa kutsi abe yincenye yalenchubo i-EIA ngekukhuleka abuye atfumele noma nguyiphi imibuto noma lwatiso lobona ngatsi lungafaka ligalelo kulenchubo kitsi. Tonkhe tiphawulo letitfolakele titawurekhodwa tibuye tilungiswe njengencenye yenchubo i-EIA.

Sicela ugcwalise luhlelomibuto loluhlanganisiwe utfumele kitsi kuFeksi x: 011 794 6946 noma lelani@cabangaenvironmental.co.za

kubhalisa njenge I&AP. Noma usishayele ku 011 794 7534.



### 4. LOKUBUKWA NGUMKLAMO

Lesicelo sihambisana ngetintfo letintsatfu letihambisanako:

- Kufaka sicelo sekuChibiyela Lilungelo Lekumayinalokwentekako MP30/5/1/2/2/191MR, ekuhlanganiseni Emalungelo etindzawo temhlaba waseFairview lapho ema-TSF atfolakala khona kanye nekucinisekisa Imisebenti leyenteka eMayini iFairview ihlanganiswe yonkhe ngaohansi kweLilungelo linye, yalawulwa ngaphansi kwe-EMP yinye; anikete Indzawo kwakhiwa kwe-Fairview TSF lensha, endzaweni ye-Bramber TSF lelungisiwe; Indzawo Kutfolakala kwemphahla anikete emigodzini yemlandvo kanye nekulungisa kabusha kwalemphahla kumaplanti lakhona ekucubungula eFairview.
- Kufaka sicelo seKugunyatwa KweSimondzawo seMisebenti Lebhalisiwe lemisha lehambisana ne-Fairview TSF lensha, kanye nekubuyeketwa kwemigodzi yemlandvo lokuphakanyisiwe.
- Kufaka sicelo se-MWL ku -TSF lensha kanye nekubuyeketwa kwemigodzi yemlandvo. Kufaka sicelo se-WML se-TSF lensha kanye nekulungiswa kwemigodzi yemlandvo.

Inchubo YeLuhlolo Lemtselela Wescoping neSimondzawo (i-EIA) lufanelekile kulesicelo. Inchubo ve-EIA itawubuka Imisebenti lephakanvisiwe lehambisana neMklamo. Nanoma imitselela lekhona lesuka kumisebenti yemayini yanyalo kanye naleyo levendlula endzaweni Inchubo ivobuka letihambisana **letiphakanyisiwe** nalomklamo lesuka Kwakhona lemitselela lekhona kutintfo tekumayina kwamanje nakwaphambilini kulendzawo titawatisa timo talendzawo yekucala ngalendzawo netimo letihlangene yaleminye imitselela lengaba khona, imitselela lekhona yemayini i-Fairview angeke igcile kulesifundvo. I-EMP itawulungiswa njengencenye yalenchubo kucinisekisa Imayini i-Fairview ingalawulwa ngaphansi kwe-EMP yinye, lehlanganisiwe.

Inchazelo ye-TSF lensha lephakanyisiwe: Umkhicito wegolide lochubekako eMayini i-Fairview usho kutsi i-BTRP TSF kufanele masinya utfole emandla. I-BML ihlose kwakha i-TSF lensha ekucaleni kwe-Bramber TSF Lendzala (lenyalo leyomiswe njengencenye ye- BTRP), lehlanganise ne- BRTP yanyalo/i- Bramber TSF lensha, kunika Indzawo kubekwa kwematailing latako. Kuphindze kwaphakanyiswa kutsi kubekelwe eceleni Indzawo ku-Moon TSF, Nyakatfo Harper kanye nema-TSF aseningizimu (alungiswe noma ahlelelwe kulungiswa) ngelikusasa lentfutfuko ye-TSF.

Sifanekiso se-TSF lensha lesiphakanyisiwe siesta kodvwa sisengakacedvwa. Lendzawo lensha lephakanyisiwe ye-TSF angeke yengce ema-30 ema- Ha. Lizinga lekudiphozitha ku-TSF litawuba ngemathani lati 100.000 ngenyanga. Budze bekugcina kwalesakhiwo ngeke sibe ngetulu kwemamitha lange-35 kusuka kulizanga

leliphasi. Kusebenta kwalesifanekiso salesakhiwo siyoba cishe iminyaka lesi 5.

Kuchazwa kwekutfolwa kabusha kwaletintfo **letiphakamiswako** lakuhlahlwa khona ngokwemlandvo: Lishumi (10) tindzwawo tekulahla letingumlandvo tiboniwe kuyofika manje ngaphasi kwe-Fairview MRA, le BML lafuna kutitfola. Letindzawo tekulahla tifaka phakatsi imfucuta yemadvwala ngetintfo tema tailing letingenca yekumayini netinchubo tangaphambilini (kuleminyaka lendlulile lenge 100 yeminyaka). Kute kulemigodzi yekulahla tasungulwa nguLomnikati wamanje Wemalungelo Ekumavina, futsi kute kulemigodzi yekulahla lenetimvumo ngokwemtsetfo lekhona wamanje (ngalesikhatsi tisungulwa, bekute umtsetfo lobewudzinga timvume talemigodzi yekulahla). Lwatiso Inlulicinisa mavelana nemalanga langiwo leyasungulwa ngayo lemigodzi alutfolakali.

I-BML iphakamisa kutfola letimphahla isebentisa letindlela temekheniki, kanye nekutfwala imphahla etindzaweni letikhona tekucubungula ngetigulumba. Imigwaco lekhona netigulumba titawusetjentiswa kutfola imigodzi, noma loku kudzinga kulungiswa.

### 5. INHLOSO YE-EIA

Bonkhe baseNingizimu Afrika banelilungelo ngeMtsetfosisekelo kuSimondzawo lesingenangoti etimphilweni tabo noma enhlalweni nekuba simondzawo titukulwane lesivikelekile kutozuza letikhona naletiseta.

Inchubo i- EIA isidzingo lesisemtsetfweni ngekwe- NEMA, kucinisekisa kutsi kungcola kwemoya nekwehla kwalokuphilako lokungabangelwa siphakamiso sentfutfuko kuyahlolwa kuvisiswe ngembi kwekutsi intfutfuko icale kwenteka. Kuvisisa umtselela welikhono kwenta batfutfukisi basebentise tindlela letifanele kuvimbela noma kwehlisa imitselela yesimondzawo lehambisana nentfutfuko lephakanyisiwe. Inchubo iyalandzelelwa ekucinisekiseni kusimama kwentfutfuko yalokuphilako kanye nekusetjentiswa kwetinsita temvelo, ngalesikhatsi kukhutsatwa umnotfo lofanelekile kanye nekutfutfuka kwasenhlalweni, kuhambisana neMtsetfosisekelo.

Inchubo ye- EIA ifaka tigaba letisidzingo letimbili; kokucala, umsebenti weScoping uyentiwa ngenhloso yekutfola tintfo letinekusebenta, imitselela netikhalo letibiyele siphakamiso sentfutfuko. Loku kwenta i-EAP, ngenchubo yekukhulumisana naLabaphetse nema-I\$AP kuchaza tifundvo letidzingekile kanye netinchubo tekuhlola kutsi tichutjwe ngesigaba se-EIA.

Sigaba i- EIA (sigaba sesi- 2) iphindze ichaze imitselela lenemandla lengavela ekusetkjentisweni kwaloMklamo, kanye nemizamo yekuchaza kubaluleka kwemtselela ngamunye. Kubaluleka kwemtselela



kutsintsa ngco lizinga lebuholi kutsi umholi wemklamo lekufanele abusebentise kuvimbela noma kwehlisa imitselela lemibi yesimondzawo.

Sincumo lekungisona lesitsatfwako ekufakeni sicelo ngekwe-MPRDA, i-NEMA ne NEM:i-WA sisala Nemtimba Losebentako (kulendzaba yi-DMR). I-DMR itawutsatsa lonkhe lwatiso lolufanelekile lwemklamo, luhlolo lwabosolwati, i-EIA, i-EMP kanye netiphawulo temphakatsi kanye neligalelo ekubukeni nabenta tincumo tabo letimayelana nesicelo. Kuletfwa kwesicelo kanye nekusebenta kwenchubo yescoping ne -EIA akusicinisekisi kutsi ligunya litawuniketwa.

### 6. TICELO TETIMVUME TEKUSEBENTISA EMANTI

Imayini i-Fairview inemvumo lekhona levunyiwe Yekusetjentiswa Kwemanti (i-WUL) lekhishwe yi-Ejensi Yekulawula Inkomati –Usutu Catchment(i-UCMA) (IUCMA), Ireferensi namba: 04/X23F/ABEFGJ/4725.

Akekho lovunyelwe kungenelela emsebentini wekusetjentiswa kwemanti ngaphandle nje uma kuvumelekile ngaphasi kwesigaba 22 Walomtsetfo Wavelonkhe Wemanti (Umtsetfo 36 wanga 1998).

Mayelana Nalomklamo lophakanyiswako, ESCON Consulting (Pty) Ltd icokiwe kufaka sicelo Semayini WUL kufaka phakatsi timvume temanti letikhona naletiphakanyiswako.

### 7. INCHUBO YEKUFAKA SICELO

I- MPRDA neMitsetfosimiso yayo ingumtsetfo lomkhulu lobukene nekutfolakala kwemalungelo kusesha, kudvonsa kanye nekucubungula timbiwa eNingizimu Afrika. I- MPRDA iphetse kutsi timbiwa eNingizimu tesive nekutsi Umbuso ngumgadzi wato.

Sigaba 102 we- MPRDA sibeka kutsi Umbambi Welilungelo kungenteka angayintjintji imisebenti yabo legunyatiwe ngaphandle kwemvumo yeNdvuna yeTimbiwa. Timayini taseBarberton kutawudzingeka tifake sicelo semvumo kuchibiyela Luhlelo lwabo le— EMP njengoba kukhulunyiwe ekucaleni.

Lesibopho semisebenti lebhalisiwe ngekweMitsetfosimiso ye-EIA leyamenyetelwa ngekwe NEMA sidzinga kutsi Ligunya Lesimondzawo litfolakale. Umklamo uhlanganiswa neMisebenti Leminyenti lebhalisiwe, kanye Nenchubo Yescoping i-EIA njengoba ichazwe kuMitsetfotimiso 21 kuya ku 24 we-EIA, 2014(njengoba uchitjiyelwe) kufanele ucale usebente.

I- NEMWA ngalokufanako ibhalisa kumitsetfosimiso yayo imisebenti ledzinga imvumo ngembi kwekutsi icale kusebenta. Inchubo yekufaka sicelo ngekwe- NEMWA ihlanganiswa netinchubo te- MPRDA ne- NEMA. Litiko Letetimbiwa (i-DMR) ingumtimba lonelikhono nakufakwa ticelo ngaphansi kwe- MPRDA, i-NEMA ne- NEMWA.

I- NWA idzinga noma ngumuphi umuntfu lofisa kusebentisa emanti (njengoba kuchaziwe emtsetfweni) kutsi atfole imvumo kuLitiko Lemanti nekutfutfwa Kwelindle (i-DWS). Lenchubo yekufaka sicelo ichutjwa yi- ESCON Consulting (Pty) Ltd. Kungachunyanwa nabo ngco kulemininingwane leniketiwe. Tiphawulo letihambisana neTicelo Temvumo Yekusebentisa Emanti (i-WULA) letitfolwe yi-Cabanga titawuniketwa i- ESCON tilungiswe ku-EIA ngendlela lefanele.

Tinchubo letifanele tekufaka sicelo tikhonjisiwe ekhasini lelilandzelako.

Mayelana nemibuto netiphawulo letihambisana ne-WULA sicela uchumane:

Chumana: Mnu Phumudzo Morris Mavhunga

Inkapani: ESCON Consulting (Pty) Ltd

Imeyili: morris@escon.org.za

Makhalekhukhwini: 072 763 0725

081 340 3086

Mayelana nemibuto netiphawulo letihambisana nenchubo yeScoping ne-EIA, kanye/noma nguyiphi leminye imibuto, sicela uchumane:

Chumana: Lelani Claassen

Inkapani: Cabanga Environmental

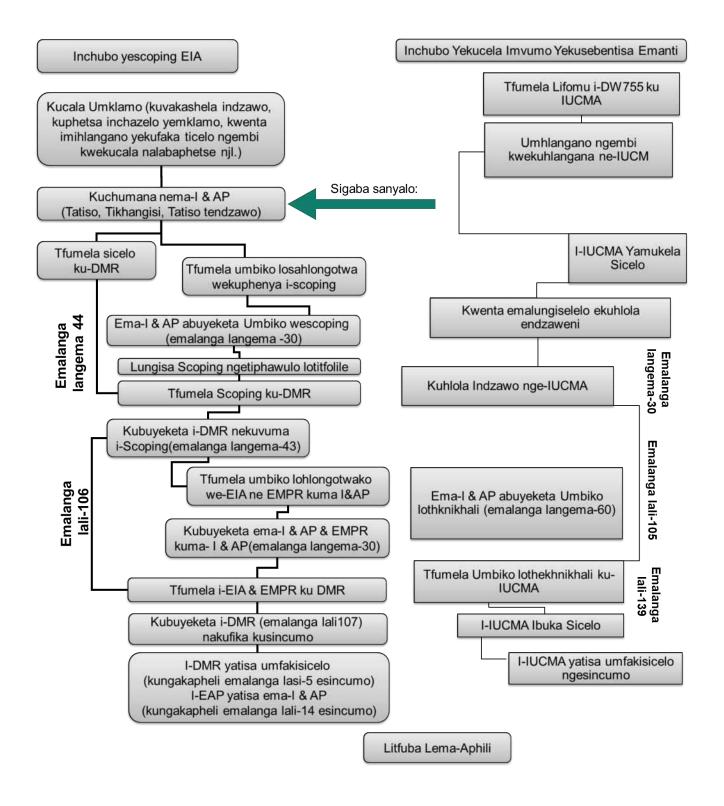
Imeyili: lelani@cabangaenvironmental.co.za

**Luc**: 011 794 7534

Lofundzako uyamenywa kutsi angenelele kunchubo Yekufaka sicelo, ngekubhalisa njenge-I&AP. Njenge-A&AP lebhalisiwe utawatiswa njalo ngetinchubo Tekufaka ticelo, kumenywa kuhambela imihlangano kanye nekubuyeketa imibiko lehlongotwako leyentiwa ngekweticelo. Lokunye, konkhe kuphawula lebhaliswe I&APs itfunyelwa Ngokweticelo kuyofakwa kumibiko lefanelekile, ifakwe phakatsi kuletinchubo.

KUBHALISA: uyacelwa usinikete kuphawula nemininingwane yekuchumana ngalokukhulu kushesha. Lombiko Wendzawo Wesikhashana Longakapheleli uyalungiswa futsi utawentiwa utfolakale ebantfwini kute baphawule ngamhlati 28 Imphala 2019. Imininingwane ngekutfolakala Kwalombiko kutawatiswa I&APs lebhalisiwe. Wamukelekile kubhalisa unikete kuphawula kwakho nganoma ngusiphi sikhatsi salenchubo yekufakwa kweticelo.







### 8. INGCIKITSI YEMKLAMO WESIMONDZAWO

Timayini letakha namuhla i- Barberton Mines Limited (i-BML) (i-Fairview, i-New Consort ne Sheba) tacala kusebenta ngetulu kweminyaka leli-100 leyengca.

Cishe iFairview yonkhe, i-New Consort neTindzawo te-Sheba Mining Right tiwa ngaphansi kwe- Barberton Nature Reserve (i-BNR) njengoba ichazwe kudatabase Yetindzawo Letivikelekile YaseNingizimu Afrika (i-SAPAD) (buka libalave ngentasi).

Indzawo i-Fairview Mining Right (i-MRA) ingena kanye ne Fairview MRA nayo yeyame Endzaweni Yemagugu Yamhlaba wonkhe Yetintsaba TeMakhonjwa eBarberton (i-WHS) leyafakwa eluhlwini Lwetindzawo Temagugu Tamhlaba wonkhe nga 2018.

Ngetulu kweminyaka leli- 100 leyengca yalemisebenti yasemayini, imphilo lesasele yayinye bekuyiforecast leyiiminyaka lesi-6 kuya kuleli 10. Timayini tichubeke njalo nekwentela phansi letilinganiso esikhatsini lesengcile kantsi tichubekile nekusebenta nemaorebody lamasha kanye netelulo kungeta kutimbiwa nemarizefu ngekusebentisa emasu ekuchubeka nekusebenta, kucinisekisa umkhakha wemsebenti losimeme wemiphakatsi lehlala phakatsi nadvutane nesigodzi saseBarberton. Luhlobo lwemisebenti yasemayini kanye neluhlobo lwemisebenti yekonga lehambisana nemaRizefu Emvelo, ngalokwetayelekile ayihambisani, nanoma, i- Pan African Resources PLC itibophelela kuyo yonkhe imitsetfo yesmondzawo kanye netinchubo letincono kucinisekisa umkhakha

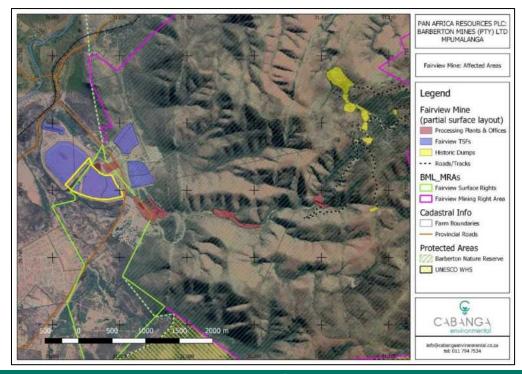
wemisebenti losisimeme wemiphakatsi lephakatsi naledvutane nesigodzi saseBarberton.

Luhlobo lwemisebenti yasemayini kanye neluhlobo lwemisebenti yekonga lehambisana nemaRizefu Emvelo, ngalokwetayelekile ayihambisani, nanoma, i-Pan African Resources PLC itibophelela kuyo yonkhe imitsetfo yesmondzawo kanye netinchubo letincono kucinisekisa simondzawo lesisimeme kanye nekongiwa kwendzawo noma kuphindza ilungiswe.

Kubuka kuba khona kwemayini kudzala kuminyaka yabo 1880, kanye nekumenyetelwa ngekweMtsetfo Wekongiwa Kwemvelo eMpumalanga we-BNR dvutane ngabo 2014, kuba khona kwekusebentiseka kabi kwemhlaba akusiyo intfo lensha kulendzawo.

Lendzawo ye-TSF lensha lephakanyisiwe itfolakala endleleni ye-Bramber TSF yelucobo kanye naku-Bramber TSF lekhulisiwe. I-Bramber TSF yelucobo iye yalungiswa kabusha kantsi lendzawo itsatfwa njengaletsikametekile.

Letindzawo tekulahla letibukwe kulungiswa tiphakatsi kwekugcinwa kwendalo kantsi atikho kutimondzawo te-ikholoji letingakatsikameteki, noma kunganakwa kwayo lemigodzi ngekwemlandvo kuye kwavumela kutsi lokumilako kutsi kuhlume kuletindzawo. Tifundvo tema-lkholoji neMhlabatsi kufanele tibukwe njengencenye ye-EIA titawuletsa kukhanya lokukhulu kulobukhulu be-ikholoji baletindzawo, kanye nemitselela lenemandla yekulungiswa lokunemandla lokuphakanyisiwe.





### 9. IMITSELELA YESIMONDZAWO LENGIYO KANYE NELUHLOLO LWASOLWATI

Letifundvo tabosolwati letilandzelako titawentiwa kantsi titawuba yincenye yenchubo ye-EIA:

| Tintfo lenemandla Umklamo longaba nemtselela kuto | Solwati lotakwenta luhlelo lwemtselela                        |
|---|---|
| Siyalu  | I-Gradient Groundwater Consulting                             |
| Emanti esicoja/lichibi                            | I-SD Hydrological Services, ne SLR Consulting (tebunjiniyeli) |
| Tinhlobo letinyenti talokuphilako                 | I-Scientific Terrestrial Services                             |
| Tasemantini nemncitsi                             | Imisebenti Yetasemantini ngekwesayensi                        |
| Imihlaba  | I-Digital Soils Africa, ne Cabanga Environmental              |
| Emagugu nePalentholoji                            | I-Archaetnos Njing. A van Volenhoven, Njing. M Bamford        |
| Umoya lohlobile                                   | I-Rayten Engineering Solutions                                |

Kungeta kutifundvo tabosolwati letibonakele ngenhla, i-Cabanga Environmental itawucedzisa luhlelo lolunabile lekuvala nekulungisa kabusha laLomklamo lophakanyisiwe, kufaka nekubalwa kwemali letawudzingeka kulungiswa kabusha kwetindzawo letitsintsekile.

### 10. INCHUBO YEKUNGENELELA KWEMPHAKATSI

Kungenelela kwemphakatsi kuyintfo lesidzingo yenchubo yekufaka sicelo. Ilungisa lilungelo lema-I&AP kutsi latiswe ngemisebenti lephakanyisiwe kanye nekuba yincenye ekutsatfweni kwetincumo Iphindze inikete i-EAP litfuba letingabatsintsa. lekuhlola nekulungisa tindzaba netinkinga letaphakanyiswa ema- I&AP tibe tivumela i- EAP kuhlola yonkhe imitselela lenemandla yemklamo lophakanyisiwe.

Kungenelela kwemphakatsi kuyintfo lesidzingo yenchubo yekufaka sicelo. Ilungisa lilungelo lema-I&AP kutsi latiswe ngemisebenti lephakanyisiwe kanye nekuba yincenye ekutsatfweni kwetincumo letingabatsintsa. Iphindze inikete i-EAP litfuba lekuhlola nekulungisa tindzaba netinkinga letaphakanyiswa ema- I&AP tibe tivumela i- EAP kuhlola yonkhe imitselela lenemandla yemklamo lophakanyisiwe

Njenge I&AP lebhalisiwe utawuhlala watiswa ngenchubo ye- Scoping & EIA, umenywe kuya emihlanganweni yemphakatsi kanye nekubuyeketa imibiko lesahlongotwa leyentiwe ngekwesicelo. Lokunye, tonkhe tiphawulo i- I&AP letibhalisile titfumela ngekweSicelo titawufakwa kumibiko lefanelekile, ibuye ilungiswe kuyo yonkhe inchubo.

### **KUBHALISWA NJANI**

Sicela ubhalise njenge I&AP kutfola Iwatiso ngekuba khona kwedokhumenti kanye nendzawo, lusuku kanye nesikhatsi sekungenelela imihlangano yemphakatsi.

Bhalisa ngekugcwalisa lifomu lelihlanganisiwe ubuye kυ Cabanga Environmental kulemininingwane yekuchumana leniketiwe, noma ngekutfumela tiphawulo letibhaliwe kunoma nguluphi luhlobo kuCabanga Environmental. Sicela ucinisekise kutsi Cabanga Environmental unemininingwane yekuchumana ledzingekako khona kuchumana kwalo lonkhe lwatiso mayelana nenchubo ye- EIA singaba ngulesifanelekile.



Lochumana: Lelani Claassen

Luc: 011 794 7534 Ifeksi: 011 794 6946

lelani@cabangaenvironmental.co.za www.cabangaenvironmental.co.za

Mayelana nemibuto netiphawulo letimayelana ne-

WULA, sicela uchumane:

Chumana: Mnu Phumudzo Morris Mavhunga

Inkapani: ESCON Consulting (Pty) Ltd

Imeyili: morris@escon.org.za

Makhalekhukhwini: 072 763 0725 noma 081 340

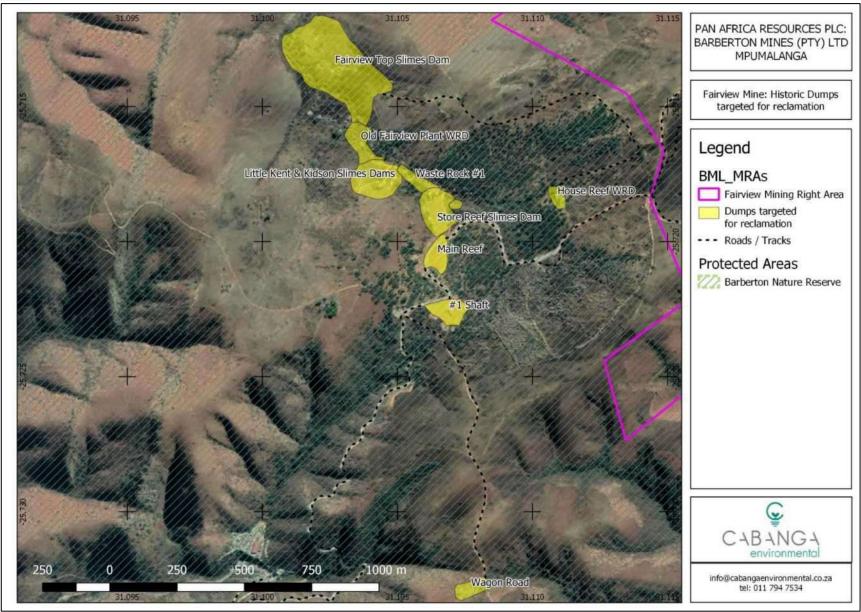
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# 31.070 PAN AFRICA RESOURCES PLC: BARBERTON MINES (PTY) LTD MPUMALANGA Fairview TSFs Legend BTRP // New Bramber RWD Fairview Mine (partial surface layout) Processing Plants & Offices Moon TSF Fairview TSFs New Fairview TSF (proposed) BML\_MRAs Fairview Surface Rights BTRP// New Bramber TSF Fairview Mining Right Area Harper North TSF Cadastral Info Farm Boundaries --- Provincial Roads Harper South TSF **Protected Areas** new TSF Bramber TSF (original) Barberton Nature Reserve Bramber TSF Expansion CABANGA 250 info@cabangaenvironmental.co.za tel: 011 794 7534

Umfanekiso 1:Indzawo ye-TSF emayini i-Fairview





Indzawo lengumgodzi wemlandvo lobukwe kulungiswa kabusha eMayini i-Fairview

# LUHLUMIBUTO LEKUNGENELELA KWEMPHAKATSI: IMAYINI I-Fairview –I-TSF LENSHA NEKULUNGISWA KWENDZAWO YEKULAHLELA IMFUCUTA

Kubhalisa njenge I&AP, sicela ugcwalise ubuye ubuyisele ku- Cabanga nge-imeyili, ifeksi noma liposi:

lelani@cabangaenvironmental.co.za; Ifeksi: (011) 794 6946 Postnet Suite 470, P/Bag X3, Northriding, 2162

Noma, sicela ubhalise ku www.cabangaenvironmental.co.za chofota ku "Kungenelela Kwemphakatsi"

| Ligama:  |  | Sibongo:                                 |
|--|--|--|
| Inombolo<br>Yelucingo:   |  | Inombolo<br>Yefeksi.:                    |
| Liposi:  |  |  |
| lmeyili:   |  |  |
| Ungatsandza kutsi uts  | intfwe njani:  | □Imeyili □Ifeksi □Liposi □Lucingo □I-SMS |
| Ingabe ungulotsintse<br>umnikati wemhlaba r                          | eke masinya noma ngelicala<br>noma umseebentisi ?  | □Yebo □Cha                               |
| Uma kungucha, yini l   | oyitsandzako kulomklamo?   |  |
| - ·  | ela usho ligama leliplazi/likhaya<br>ne kulokusetjentiswa kwemhlaba  |  |
| noma ekucitfweni kv  | valomklamo? Uma kungu yebo, eka kufaka lamanye emakhasi).  |  |
|  | kwentiwa kutawuba nemtselela<br>temnotfo ekuhlaleni? Njani?<br>akhasi).  |  |
| -  | <b>minye imitselela loyatiko</b><br>Ululeka kufaka emakhasi).  |  |
| lengadzinga kutsi ir<br>tindzawo temasiko, ti<br>timphawunoma tindza | dzawo lencelencele loyatiko<br>nganakwa (k.k. emangcwaba,<br>lwanyana letingahle tishabalale,<br>awo letikhetsekile tesimondzawo<br>a lamanye emakhasi). |  |
| Unato yini leti<br>longatiphakamisa?<br>emakhasi).                   | <b>nye tindlela tekuvimbela</b><br>(khululeka kufaka lamanye   |  |
|  | nyebantfu, tinhlangano noma<br>o lekufanele atiswe? Sicela<br>ne yekuchumana.  | □Yebo □Cha                               |
|  | ngakuphawula, lokukutsintsako<br>uleka kufaka emakhasi).   |  |

ANNEXURE C: PROOF OF DELIVERY: BACKGROUND INFORMATION DOCUMENT





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29 October 2019
BID - Firenew - Bourbehan

# Fairview BID Postage

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# ATTENDANCE REGISTER: + BID DELIVERY

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MEETING: COMMUNITY MEETING

DATE: 5 NOW ZOLG TIME: 11 hoo.

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MEETING: Community Meeting

# ATTENDANCE REGISTER: + 810 Delivers

DATE: 5 Nov 2017 TIME: 11400

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CABANGA environmental

BID DELIVERY: Fairion - BID Delivery

DATE: 6 NOU 2019

| NAME:                       | COMPANY:                     | CELL NO.:     | SIGNATURE: | E-MAIL ADDRESS:            |
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| D.S. BotHMA                 | BRAMBER FARM3134 27718706355 | 4 27718706355 | - Whe      |                            |
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| Evelyn                      | Verwam Soumills              | 08)7125185    | 500        | K                          |
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|                             |                              |               |            |                            |

# Michelle Venter

From:

Michelle Venter

Sent:

06 November 2019 02:48 PM

Subject:

Background Information Document, Barberton Mines (Pty) Ltd: Fairview project.

Fairview\_BID-English\_V4.pdf

Tracking:

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| 'ncamisosdumo@gmail.com'               |                                |
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| 'nico@mountainlands.co.za'             |                                |
| 'num@bmines.co.za'                     |                                |
| 'Numchairman@bmines,co.za'             |                                |

Please find attached Background Information Document in English for Barberton Mines (Pty) Ltd: Fairview project. Due to mailbox constraints the next email will have the SiSwati Background Information Document.

Should you have any queries please email: <a href="mailto:lelani@cabangaenvironmental.co.za">lelani@cabangaenvironmental.co.za</a>

Thank you

Kind regards,



Michelle Venter (B Sc Hons.)

e: michelle@cabangaenvironmental.co.za

Unit 5 & 6 Beyers Office Park, Bosbok Road, Randpark Ridge www.cabangaenvironmental.co.za









#### Michelle Venter

From:

Michelle Venter

Sent:

06 November 2019 02:51 PM

Subject:

Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

Attachments:

Fairview\_BID-SiSwati\_Final.pdf

#### Tracking:

#### Recipient

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'Khethiwe.malaza@mbombela.gov.za'

'molimisi,mathedimosa@drdlr.gov.za'

'Gcinani.Magagula@drdlr.gov.za'

'zanele.sihlangu@drdlr.gov.za'

'simanga.nkosi@drdlr.gov.za'

'clement.maseko@drdlr.gov.za'

'angeline.mametja@drdlr.gov.za'

'nndianya@mpg.gov.za'

'rmadalane@mpg.gov.za'

'nyathikazibw@mpg.gov.za'

'nndlanya@mpg.gov.za'

'rmadalane@mpg.gov.za'

'nyathikazibw@mpg.gov.za'

'molimisi.mathedimosa@drdlr.gov.za'

'Gçinani.Magagula@drdlr.gov.za'

'zanele.sihlangu@drdlr.gov.za'

'simanga.nkosi@drdlr.gov.za'

'clement.maseko@drdlr.gov.za'

#### Delivery

Delivered: 2019/11/06 02:52 PM

'angeline.mametja@drdlr.gov.za'

'jdevos@gigajoule.co.za'

'nico@mountainlands.co.za'

'jdevos@gigajoule.co.za'

'kobie@siyalima.co.za'

'nwgold@yahoo.com'

'nico@mountainlands.co.za'

'molimisi.mathedimosa@drdlr.gov.za'

'Gcinani.Magagula@drdlr.gov.za'

'zanele.sihlangu@drdlr.gov.za'

'simanga.nkosi@drdlr.gov.za'

'clement.maseko@drdlr.gov.za'

'angeline.mametja@drdlr.gov.za'

'molimisi.mathedimosa@drdlr.gov.za'

'Gcinani.Magagula@drdir.gov.za'

'zanele.sihlangu@drdlr.gov.za'

'simanga.nkosi@drdlr.gov.za'

'clement.maseko@drdlr.gov.za'

'angeline.mametja@drdlr.gov.za'

'molimisi.mathedimosa@drdlr.gov.za'

'Gcinani.Magagula@drdlr.gov.za'

'zanele.sihlangu@drdlr.gov.za'

'simanga.nkosi@drdlr.gov.za'

'clement.maseko@drdlr.gov.za'

'angeline.mametja@drdlr.gov.za'

'molimisi.mathedimosa@drdlr.gov,za'

'Gcinani. Magagula@drdlr.gov.za'

'zanele.sihlangu@drdlr.gov.za'

'simanga.nkosi@drdlr.gov.za'

'clement.maseko@drdlr.gov.za'

'angeline.mametja@drdlr.gov.za'

'nndlanya@mpg.gov.za'

'rmadalane@mpg.gov.za'

'nyathikazibw@mpg.gov.za'

'nndlanya@mpg.gov.za'

'rmadalane@mpg.gov.za'

'nyathikazibw@mpg.gov.za'

'nndlanya@mpg.gov.za'

'rmadalane@mpg.gov.za'

'nyathikazibw@mpg.gov.za'

'nndlanya@mpg.gov.za'

'rmadalane@mpg.gov.za'

'nyathikazibw@mpg.gov.za'

#### Recipient

Delivery

'nndlanya@mpg.gov.za'

'rmadalane@mpg.gov.za'

'nyathikazibw@mpg.gov.za'

'nndlanya@mpg.gov.za'

'rmadalane@mpg.gov.za'

'nyathikazibw@mpg.gov.za'

'comms@kishugu.com'

'comms@wofire.co.za'

'info@workingonfire.com'

'enterprises@eskom.co.za'

'csi@eskom.co.za'

'molimisi.mathedimosa@drdlr.gov.za'

'Gcinani.Magagula@drdlr.gov.za'

'zanele.sihlangu@drdlr.gov.za'

'simanga.nkosi@drdlr.gov.za'

'clement.maseko@drdlr.gov.za'

'angeline.mametja@drdlr.gov.za'

'molimisi.mathedimosa@drdlr.gov.za'

'Gcinani,Magagula@drdlr.gov.za'

'zanele.sihlangu@drdlr.gov.za'

'simanga.nkosi@drdlr.gov.za'

'clement.maseko@drdlr.gov.za'

'angeline.mametja@drdlr.gov.za'

'molimisi.mathedimosa@drdlr.gov.za'

'Gcinani.Magagula@drdlr.gov.za'

'zanele.sihlangu@drdlr.gov.za'

'simanga.nkosi@drdlr.gov.za'

'clement.maseko@drdlr.gov.za'

'angeline.mametja@drdlr.gov.za'

'nndlanya@mpg.gov.za'

'rmadalane@mpg.gov.za'

'nyathikazibw@mpg.gov.za'

'nico@mountainlands.co.za'

'Bonginkosi.Masuku@transnet.net'

'christelle.vandermerwe@transnet.net'

'Ronelle.gabier@transnet.net'

'abraham@dme.gov.za'

'mnugunib@dwaf.gov.za'

'vilakazisf@mpg.gov.za'

'nilecrocs@mweb.co.za'

'mmmabuza@teikomsa.net'

'jandewitt@vodamail.co.za'

'pieter.briel@sappi.com'

#### Recipient

#### Delivery

'bongane@umjindi.gov.za'

imikeme@nda.agric.zaf

'astrid@barberton.co.za'

'tonyferrar@lantic.net'

'rpcommittee@icon.co.za'

'anuns@icon.co.za'

'bjbird@soft.co.za'

'amourant@iafrica.com'

'BMashabane@environment.gov.za'

'marisa.coetzee@mtpa.co.za'

'coetzeemarisa@gmail.com'

'mervyn.lotter@gmail.com'

"JMarakala@mpg.gov.za"

'mnisif@iucma.co.za'

'mthembig@iucma.co.za'

'samradonline@dmr.gov.za'

'enquiries@dmr.gov.za'

'Johan.Eksteen@mtpa.co.za'

'Khethiwe.malaza@inbombela.gov.za.'

'Bonginkosi, Masuku@transnet.net'

'dan.mahlangu@mtpa.co.za'

'francois@mtpa.co.za'

'justus@mtpa.co.za'

't.ouis.loock@mtpa.co.za'

'selvy@mpg.gov.za'

'reuben.ngwenya@mtpa.co.za'

'reuben.ngwenya@sanparks.org'

'smaluleka@mpg.gov.za'

'adelange@mpg.gov.za'

'SHlatswayo@mpg.gov.za'

'Mahlalelamm@mpg.gov.za'

'gcowden@mpg.gov.za'

'pnntuli@mpg.gov.za'

'benviro@telkomsa.net'

'hweldon@sahra.org.za'

'philipminnaar61@gmail.com'

'marinda.marais@mtpa.co.za'

'nmachete@sahra.org.za'

'rekwele@batobic.co.za'

'TNtloko@environment.gov.za'

'zhlaka@mpg.gov.za'

'Aubrey.Tshivhandekano@dmr.gov.za'

'Rntusi@ehlanzeni.gov.za'

| Recipient                              | Delivery                       |
|--|--------------------------------|
| 'Wendy.Tshawe@mbombela.gov.za'         |                                |
| 'hshabangu@ehlanzeni.gov.za'           |                                |
| 'Ben.Steyn@mbombela.gov.za'            |                                |
| 'Dumisani.mabuza@mbombela.gov.za'      |                                |
| 'Francois.duToit@mtpa.co.za'           |                                |
| 'franskrige@telkomsa.net'              |                                |
| 'Gcalitz@thedti.gov.za'                |                                |
| 'Liberty. Shongwe@mbombela.gov.za'     |                                |
| 'fcebisilendwandwe@gmail.com'          |                                |
| 'jsingh@tourism.gov.za'                |                                |
| 'jeff.nkuna@mbombela.gov.za'           |                                |
| 'MokutuleK@daff.gov.za'                |                                |
| 'Johan.Eksteen@mtpa.co.za'             |                                |
| 'kate.dire@energy.gov.za'              |                                |
| 'n Imufumadi@ruraldevelopment, gov.za' | Failed: 2019/11/06 02:51 PM    |
| 'm thombenil@dwa.gov.za'               |                                |
| 'ForssmaL@dot.gov.za'                  |                                |
| 'Mbuyi.Dondashe@dpw.gov.za'            |                                |
| 'moipone.ngoasheng@dhs.gov.za`         |                                |
| 'MulaudziM@dws.gov.za'                 |                                |
| 'Masekop@mpg.gov.za'                   |                                |
| 'Siyabulela K@daff.gov.za'             |                                |
| 'KgabilengN@dws.gov.za'                |                                |
| 'municipal manager @mbombela.gov.za'   |                                |
| 'sam.nkosi@drdlr.gov.za'               | Delivered; 2019/11/06 02:52 PM |
| 'TRamavhona@environment.gov.za'        |                                |
| 'PatherT@dws.gov.za'                   |                                |
| 'BotaV@nra.co.za'                      |                                |
| 'LesufiMY@eskom.co.za'                 |                                |
| 'ncamisosdumo@gmail.com'               |                                |
| 'sthembiso.vilakazi@mbombela.gov.za'   |                                |
| 'maximiliaan.dekock@drdlr.gov.za'      | Delivered: 2019/11/06 02:52 PM |
| 'Anton Wassenaar@spar.co.za'           |                                |
| 'caryla@bmines.co.za'                  |                                |
| 'barbrookmines@sturns.co.za'           |                                |
| 'admin@batobic.co.za'                  |                                |
| 'chamber@barberton.co.za'              |                                |
| 'admin@batobic.co.za'                  |                                |
| 'nico@mountainlands.co.za'             |                                |
| 'num@bmines.co.za'                     |                                |
| 'Numchairman@bmines.co.za'             |                                |

Please find attached Background Information Document in SiSwati for Barberton Mines (Pty) Ltd: Fairview project.

Should you have any queries please email:

lelani@cabangaenvironmental.co.za

Thank you

Kind regards,



#### Michelle Venter (B Sc Hons.)

e: michelle@cabangaenvironmental.co.za

Unit 5 & 6 Beyers Office Park, Bosbok Road, Randpark Ridge www.cabangaenvironmental.co.za









From: Mail Delivery System <Mailer-Daemon@mail-filter-10.dotnetwork.co.za>

To: Francois.duToit@mtpa.co.za; marinda.marais@mtpa.co.za; BotaV@nra.co.za;

caryla@bmines.co.za; christelle.vandermerwe@transnet.net; dan.mahlangu@mtpa.co.za;

justus@mtpa.co.za; Louis.loock@mtpa.co.za; LesufiMY@eskom.co.za; enterprises@eskom.co.za; csi@eskom.co.za; num@bmines.co.za; Numchairman@bmines.co.za; Ronelle.gabier@transnet.net;

Bonginkosi.Masuku@transnet.net; Johan.Eksteen@mtpa.co.za; francois@mtpa.co.za;

reuben.ngwenya@mtpa.co.za; reuben.ngwenya@sanparks.org

**Sent:** 06 November 2019 03:43 PM

Subject: Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

#### Your message has been delivered to the following recipients:

Francois.duToit@mtpa.co.za

marinda.marais@mtpa.co.za

BotaV@nra.co.za

caryla@bmines.co.za

christelle.vandermerwe@transnet.net

dan.mahlangu@mtpa.co.za

justus@mtpa.co.za

Louis.loock@mtpa.co.za

LesufiMY@eskom.co.za

enterprises@eskom.co.za

csi@eskom.co.za

num@bmines.co.za

Numchairman@bmines.co.za

Ronelle.qabier@transnet.net

Bonginkosi.Masuku@transnet.net

Johan.Eksteen@mtpa.co.za

francois@mtpa.co.za

reuben.ngwenya@mtpa.co.za

# reuben.ngwenya@sanparks.org

From: To: Mail Delivery System <Mailer-Daemon@mail-filter-10.dotnetwork.co.za> Ben. Steyn@mbombela.gov.za; Dumisani.mabuza@mbombela.gov.za; Wendy, Tshawe@mbombela.gov.za; Liberty. Shongwe@mbombela.gov.za; jeff.nkuna@mbombela.gov.za; sthembiso.vilakazi@mbombela.gov.za; municipalmanager@mbombela.gov.za; Khethiwe.malaza@mbombela.gov.za; mthembig@iucma.co.za; mnisif@iucma.co.za; ncamisosdumo@gmail.com; philipminnaar61@gmail.com; mervyn.lotter@gmail.com; coetzeemarisa@gmail.com; jsingh@tourism.gov.za; Aubrey.Tshivhandekano@dmr.gov.za; TNtloko@environment.gov.za; PatherT@dws.gov.za; ForssmaL@dot.gov.za; Mbuyi,Dondashe@dpw.gov.za; kate.dire@energy.gov.za; mthombenil@dwa.gov.za; KgabilengN@dws.gov.za; TRamavhona@environment.gov.za; MułaudziM@dws.gov.za; mnugunib@dwaf.gov.za; samradonline@dmr.gov.za; enquiries@dmr.gov.za; BMashabane@environment.gov.za; franskrige@telkomsa.net; benviro@telkomsa.net; mmmabuza@telkomsa.net; gcowden@mpg.gov.za; pnntuli@mpg.gov.za; adelange@mpg.gov.za; SHlatswayo@mpg.gov.za; Mahlalelamm@mpg.gov.za; zhlaka@mpg.gov.za; moipone.ngoasheng@dhs.gov.za; Masekop@mpg.gov.za; vilakazisf@mpg.gov.za; nndlanya@mpg.gov.za; rmadalane@mpg.gov.za; nyathikazibw@mpg.gov.za; smaluleka@mpg.gov.za; selvy@mpg.gov.za; JMarakala@mpg.gov.za; rekwele@batobic.co.za; admin@batobic.co.za; hweldon@sahra.org.za; nmachete@sahra.org.za; chamber@barberton.co.za; astrid@barberton.co.za; pieter.briel@sappi.com; comms@kishugu.com; info@workingonfire.com; comms@wofire.co.za; nwgold@yahoo.com; anuns@icon.co.za; rpcommittee@icon.co.za; bjbird@soft.co.za; amourant@iafrica.com 06 November 2019 03:10 PM

Sent:

Subject:

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview project.

#### Your message has been delivered to the following recipients:

Ben.Steyn@mbombela.gov.za

Dumisani.mabuza@mbombela.gov.za

Wendy. Tshawe@mbombela.gov.za

Liberty.Shongwe@mbombela.gov.za

jeff.nkuna@mbombela.gov.za

sthembiso.vilakazi@mbombela.gov.za

municipalmanager@mbombela.gov.za

Khethiwe.malaza@mbombela.gov.za

mthembig@iucma.co.za

mnisif@iucma.co.za

ncamisosdumo@gmail.com

philipminnaar61@gmail.com

mervyn.lotter@gmail.com

coetzeemarisa@gmail.com

<u>jsingh@tourism.gov.za</u>

Aubrey. Tshiyhandekano@dmr.gov.za

TNtloko@environment.gov.za

PatherT@dws.gov.za

ForssmaL@dot.gov.za

Mbuyi.Dondashe@dpw.gov.za

kate.dire@energy.gov.za

mthombenil@dwa.gov.za

KgabilengN@dws.gov.za

TRamavhona@environment.gov.za

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mnugunib@dwaf.gov.za

samradonline@dmr.gov.za

enquiries@dmr.gov.za

BMashabane@environment.gov.za

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benviro@telkomsa.net

mmmabuza@telkomsa.net

gcowden@mpg.gov.za

pnntuli@mpg.gov.za

adelange@mpg.gov.za

SHlatswayo@mpg.gov.za

Mahlalelamm@mpg.gov.za

zhlaka@mpg.gov.za moipone.ngoasheng@dhs.gov.za Masekop@mpg.gov.za vilakazisf@mpq.qov.za nndlanya@mpg.gov.za rmadalane@mpg.gov.za nyathikazibw@mpg.gov.za smaluleka@mpg.gov.za selvy@mpg.gov.za JMarakala@mpg.gov.za rekwele@batobic.co.za admin@batobic.co.za <u>hweldon@sahra.org.za</u> nmachete@sahra.org.za chamber@barberton.co.za astrid@barberton.co.za

pieter.briel@sappi.com

comms@kishugu.com

info@workingonfire.com

comms@wofire.co.za

nwgold@yahoo.com

anuns@icon.co.za

rpcommittee@icon.co.za

bjbird@soft.co.za

amourant@iafrica.com

From:

Mail Delivery System <Mailer-Daemon@spe7.spambox.co.za>

To:

kobie@siyalima.co.za

Sent:

06 November 2019 03:00 PM

Subject:

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

### Your message has been delivered to the following recipients:

#### kobie@siyalima.co.za

From:

Mail Delivery System < Mailer-Daemon@spe8.ucebox.co.za>

To: Sent: nico@mountainlands.co.za 06 November 2019 02:57 PM

Subject:

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

# Your message has been delivered to the following recipients:

#### nico@mountainlands.co.za

From:

postmaster@gigajoule.co.za

To:

jdevos@gigajoule.co.za

Sent:

06 November 2019 02:57 PM

Subject:

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

# Your message has been delivered to the following recipients:

jdevos@gigajoule.co.za

From:

postmaster@sturns.co.za

To:

barbrookmines@sturns.co.za 06 November 2019 02:56 PM

Sent: Subject:

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

# Your message has been delivered to the following recipients:

barbrookmines@sturns.co.za

From: Mailer-Daemon@email.thedti.gov.za

To: Gcalitz@thedti.gov.za

**Sent:** 06 November 2019 02:53 PM

Subject: Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

# Your message has been delivered to the following recipients:

Gcalitz@thedti.gov.za

From: postmaster@SPARZA.onmicrosoft.com

To:Anton,Wassenaar@spar.co.zaSent:06 November 2019 02:51 PM

Subject: Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

# Your message has been delivered to the following recipients:

Anton.Wassenaar@spar.co.za

Mail Delivery System <Mailer-Daemon@mail-filter-10.dotnetwork.co.za> From:

nilecrocs@mweb.co.za To: 06 November 2019 02:50 PM

Sent:

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview Subject:

project.

# Your message has been delivered to the following recipients:

<u>nilecrocs@mweb.co.za</u>

From: Mail Delivery System < Mailer-Daemon@mail-filter-10.dotnetwork.co.za>

To:nilecrocs@mweb.co.zaSent:06 November 2019 02:50 PM

Subject: Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

### Your message has been delivered to the following recipients:

#### nilecrocs@mweb.co.za

From:

Microsoft Outlook

To:

zanele.sihlangu@drdlr.gov.za; simanga.nkosi@drdlr.gov.za

Sent:

06 November 2019 02:48 PM

Subject:

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

# Your message has been delivered to the following recipients:

zanele.sihlangu@drdlr.gov.za (zanele.sihlangu@drdlr.gov.za)

simanga.nkosi@drdlr.gov.za (simanga.nkosi@drdlr.gov.za)

From:

Microsoft Outlook

To:

molimisi, mathedimosa@drdlr.gov.za

Sent:

06 November 2019 02:48 PM

Subject:

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

# Your message has been delivered to the following recipients:

 $\underline{molimisi.mathedimosa@drdlr.gov.za~(molimisi.mathedimosa@drdlr.gov.za)}$ 

From:

Microsoft Outlook

To: Sent: angeline.mametja@drdlr.gov.za 06 November 2019 02:48 PM

Subject:

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

### Your message has been delivered to the following recipients:

angeline.mametja@drdlr.gov.za (angeline.mametja@drdlr.gov.za)

From:

Microsoft Outlook

To:

maximiliaan.dekock@drdlr.gov.za

Sent: Subject: 06 November 2019 02:48 PM Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

# Your message has been delivered to the following recipients:

maximiliaan.dekock@drdlr.gov.za (Max.dekock@drdlr.gov.za)

Microsoft Outlook From: sam.nkosi@drdlr.gov.za To: Sent:

06 November 2019 02:48 PM

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview Subject:

project.

# Your message has been delivered to the following recipients:

sam.nkosi@drdlr.gov.za (sam.nkosi@drdlr.gov.za)

From:

Microsoft Outlook

To:

clement.maseko@drdlr.gov.za 06 November 2019 02:48 PM

Sent: Subject:

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

# Your message has been delivered to the following recipients:

<u>clement.maseko@drdlr.gov.za (clement.maseko@drdlr.gov.za)</u>

From: Microsoft Outlook

To:Gcinani.Magagula@drdlr.gov.zaSent:06 November 2019 02:48 PM

Subject: Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

# Your message has been delivered to the following recipients:

Gcinani.Magagula@drdlr.gov.za (Gcinani.Magagula@drdlr.gov.za)

From:

postmaster@ehlanzeni.gov.za

To:

Rntusi@ehlanzeni.gov.za 06 November 2019 05:04 PM

Sent: Subject:

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

### Your message has been delivered to the following recipients:

#### Rntusi@ehlanzeni.gov.za

From:

Mail Delivery System < Mailer-Daemon@mail-filter-04.dotnetwork.co.za>

To:

Francois.duToit@mtpa.co.za; christelle.vandermerwe@transnet.net; Ronelle.gabier@transnet.net; dan.mahlangu@mtpa.co.za; justus@mtpa.co.za;

marinda.marais@mtpa.co.za; BotaV@nra.co.za; num@bmines.co.za;

Numchairman@bmines.co.za; caryla@bmines.co.za; Bonginkosi.Masuku@transnet.net; Johan.Eksteen@mtpa.co.za; francois@mtpa.co.za; reuben.ngwenya@mtpa.co.za; reuben.ngwenya@sanparks.org; Louis.loock@mtpa.co.za; LesufiMY@eskom.co.za;

enterprises@eskom.co.za; csi@eskom.co.za

Sent:

06 November 2019 03:45 PM

Subject:

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

### Your message has been delivered to the following recipients:

Francois.duToit@mtpa.co.za

christelle.vandermerwe@transnet.net

Ronelle.gabier@transnet.net

dan.mahlangu@mtpa.co.za

justus@mtpa.co.za

marinda.marais@mtpa.co.za

BotaV@nra.co.za

num@bmines.co.za

Numchairman@bmines.co.za

caryla@bmines.co.za

Bonginkosi.Masuku@transnet.net

Johan. Eksteen@mtpa.co.za

francois@mtpa.co.za

reuben.ngwenya@mtpa.co.za

reuben.ngwenya@sanparks.org

Louis.loock@mtpa.co.za

LesufiMY@eskom.co.za

enterprises@eskom.co.za

### csi@eskom.co.za

From: To: Mail Delivery System < Mailer - Daemon@mail-filter-04.dotnetwork.co.za > Ben. Steyn@mbombela.gov.za; Dumisani.mabuza@mbombela.gov.za; Wendy.Tshawe@mbombela.gov.za; Liberty.Shongwe@mbombela.gov.za; jeff.nkuna@mbombela.gov.za; sthembiso.vilakazi@mbombela.gov.za; municipalmanager@mbombela.gov.za; Khethiwe.malaza@mbombela.gov.za; ncamisosdumo@gmail.com; philipminnaar61@gmail.com; mervyn.lotter@gmail.com; coetzeemarisa@gmail.com; jsingh@tourism.gov.za; Aubrey. Tshivhandekano@dmr.gov.za; TNtloko@environment.gov.za; PatherT@dws.gov.za; ForssmaL@dot.gov.za; Mbuyi.Dondashe@dpw.gov.za; kate.dire@energy.gov.za; mthombenil@dwa.gov.za; KgabilengN@dws.gov.za; TRamavhona@environment.gov.za; MulaudziM@dws.gov.za; mnugunib@dwaf.gov.za; samradonline@dmr.gov.za; enquiries@dmr.gov.za; BMashabane@environment.gov.za; franskrige@telkomsa.net; benviro@telkomsa.net; mmmabuza@telkomsa.net; gcowden@mpg.gov.za; pnntuli@mpg.gov.za; adelange@mpg.gov.za; SHlatswayo@mpg.gov.za; Mahlalelamm@mpg.gov.za; zhlaka@mpg.gov.za; moipone.ngoasheng@dhs.gov.za; Masekop@mpg.gov.za; vilakazisf@mpg.gov.za; nndlanya@mpg.gov.za; rmadalane@mpg.gov.za; nyathikazibw@mpg.gov.za; smaluleka@mpg.gov.za; selvy@mpg.gov.za; JMarakala@mpg.gov.za; rekwele@batobic.co.za; admin@batobic.co.za; hweldon@sahra.org.za; nmachete@sahra.org.za; mthembig@iucma.co.za; mnisif@iucma.co.za; chamber@barberton.co.za; astrid@barberton.co.za; pieter.briel@sappi.com; comms@kishugu.com; info@workingonfire.com; comms@wofire.co.za; nwgold@yahoo.com; anuns@icon.co.za; rpcommittee@icon.co.za; bjbird@soft.co.za; amourant@iafrica.com

Sent: Subject: 06 November 2019 03:10 PM

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

#### Your message has been delivered to the following recipients:

Ben.Steyn@mbombela.gov.za

Dumisani.mabuza@mbombela.gov.za

Wendy. Tshawe@mbombela.gov.za

Liberty.Shongwe@mbombela.gov.za

jeff.nkuna@mbombela.gov.za

sthembiso.vilakazi@mbombela.gov.za

municipalmanager@mbombela.gov.za

Khethiwe.malaza@mbombela.gov.za

ncamisosdumo@gmail.com

philipminnaar61@gmail.com

mervyn.lotter@gmail.com

coetzeemarisa@gmail.com

jsingh@tourism.gov.za

Aubrey. Tshivhandekano@dmr.gov.za

TNtloko@environment.gov.za

PatherT@dws.gov.za

ForssmaL@dot.gov.za

Mbuyi.Dondashe@dpw.gov.za

kate.dire@energy.gov.za

mthombenil@dwa.gov.za

KgabilengN@dws.gov.za

TRamavhona@environment.gov.za

MulaudziM@dws.gov.za

mnuqunib@dwaf.gov.za

samradonline@dmr.gov.za

enquiries@dmr.gov.za

BMashabane@environment.gov.za

franskrige@telkomsa.net

benviro@telkomsa.net

mmmabuza@telkomsa.net

gcowden@mpg.gov.za

pnntuli@mpg.gov.za

adelange@mpg.gov.za

SHlatswayo@mpq.qov.za

Mahlalelamm@mpg.gov.za

zhlaka@mpq.gov.za

moipone.ngoasheng@dhs.gov.za

Masekop@mpg.gov.za

<u>wilakazisf@mpg.gov.za</u>

nndlanya@mpg.gov.za

rmadalane@mpq.gov.za

nyathikazibw@mpg.gov.za

smaluleka@mpg.gov.za

celvy@mpg.gov.za

rekwele@batobic.co.za

admin@batobic.co.za

hweldon@sahra.org.za

nmachete@sahra.org.za

mthembig@iucma.co.za

mnisif@iucma.co.za

chamber@barberton.co.za

astrid@barberton.co.za

pieter.briel@sappi.com

comms@kishugu.com

info@workingonfire.com

comms@wofire.co.za

nwgold@yahoo.com

anuns@icon.co.za

rpcommittee@icon.co.za

bjbird@soft.co.za

amourant@iafrica.com

From: Mail Delivery System <Mailer-Daemon@spe4.spambox.co.za>

To: kobie@siyalima.co.za

**Sent:** 06 November 2019 03:02 PM

Subject: Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Your message has been delivered to the following recipients:

kobie@siyalima.co.za

From: Mail Delivery System < Mailer-Daemon@spe9.ucebox.co.za>

To:nico@mountainlands.co.zaSent:06 November 2019 02:59 PM

Subject: Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Your message has been delivered to the following recipients:

nico@mountainlands.co.za

From: postmaster@gigajoule.co.za

To:jdevos@gigajoule.co.zaSent:06 November 2019 02:59 PM

Subject: Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Your message has been delivered to the following recipients:

idevos@gigajoule.co.za

From:

postmaster@sturns.co.za

To:

barbrookmines@sturns.co.za

Sent:

06 November 2019 02:58 PM

Subject:

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Your message has been delivered to the following recipients:

barbrookmines@sturns.co.za

From: Mailer-Daemon@email.thedti.gov.za

To: Gcalitz@thedti.gov.za

**Sent:** 06 November 2019 02:55 PM

Subject: Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Your message has been delivered to the following recipients:

Gcalitz@thedti.gov.za

From:

postmaster@SPARZA.onmicrosoft.com

To:

Anton.Wassenaar@spar.co.za 06 November 2019 02:53 PM

Sent: Subject:

Defivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Your message has been delivered to the following recipients:

Anton.Wassenaar@spar.co.za

From: Mail Delivery System < Mailer Daemon@mail-filter-04.dotnetwork.co.za >

To: nilecrocs@mweb.co.za

**Sent:** 06 November 2019 02:52 PM

Subject: Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

## Your message has been delivered to the following recipients:

nilecrocs@mweb.co.za

From:

Microsoft Outlook

To:

zanele. sihlangu@drdlr.gov.za; simanga.nkosi@drdlr.gov.za

Sent:

06 November 2019 02:52 PM

Subject:

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

## Your message has been delivered to the following recipients:

zanele.sihlangu@drdlr.gov.za (zanele.sihlangu@drdlr.gov.za)

simanga.nkosi@drdlr.gov.za (simanga.nkosi@drdlr.gov.za)

From:

Microsoft Outlook

To:

maximiliaan.dekock@drdlr.gov.za

Sent:

06 November 2019 02:52 PM

Subject:

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Your message has been delivered to the following recipients:

maximiliaan.dekock@drdlr.gov.za (Max.dekock@drdlr.gov.za)

From:

Microsoft Outlook

To:

maximiliaan.dekock@drdlr.gov.za

Sent:

06 November 2019 02:52 PM

Subject:

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Your message has been delivered to the following recipients:

maximiliaan.dekock@drdlr.gov.za (Max.dekock@drdlr.gov.za)

From:

Microsoft Outlook

To:

molimisi.mathedimosa@drdlr.gov.za

Sent:

06 November 2019 02:52 PM

Subject:

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Your message has been delivered to the following recipients:

 $\underline{molimisi.mathedimosa@drdlr.gov.za~(molimisi.\underline{mathedimosa@drdlr.gov.za)}}$ 

From:

Microsoft Outlook

To:

angeline.mametja@drdlr.gov.za

Sent:

06 November 2019 02:52 PM

Subject:

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Your message has been delivered to the following recipients:

angeline.mametja@drdlr.gov.za (angeline.mametja@drdlr.gov.za)

From:

Microsoft Outlook

То:

sam.nkosi@drdlr.gov.za

Sent:

06 November 2019 02:52 PM

Subject:

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Your message has been delivered to the following recipients:

sam.nkosi@drdlr.gov.za (sam.nkosi@drdlr.gov.za)

From:

Microsoft Outlook

To:

clement.maseko@drdlr.gov.za 06 November 2019 02:52 PM

Sent: Subject:

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Your message has been delivered to the following recipients:

clement.maseko@drdlr.gov.za (clement.maseko@drdlr.gov.za)

From:

Microsoft Outlook

To: Sent: Gcinani.Magagula@drdlr.gov.za 06 November 2019 02:52 PM

Subject:

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Your message has been delivered to the following recipients:

Gcinani.Magagula@drdlr.gov.za (Gcinani.Magagula@drdlr.gov.za)

From:

postmaster@ehlanzeni.gov.za

To:

Rntusi@ehlanzeni.gov.za

Sent:

06 November 2019 04:10 PM

Subject:

Delivered: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Your message has been delivered to the following recipients:

Rntusi@ehlanzeni.gov.za

From: Mail Delivery System <MAILER-DAEMON@vodamail.co.za>

To: jandewitt@vodamail.co.za
Sent: jandewitt@vodamail.co.za
06 November 2019 02:56 PM

Subject: Expanded: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

# Your message has been delivered to the following groups:

jandewitt@vodamail.co.za

From:

Mail Delivery System <MAILER-DAEMON@vodamail.co.za>

To:

jandewitt@vodamail.co.za 06 November 2019 02:58 PM

Sent: Subject:

Expanded: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Your message has been delivered to the following groups:

jandewitt@vodamail.co.za

From:

Andre Eagar < Andre. Eagar@dmr.gov.za>

Sent:

06 November 2019 03:05 PM

To:

Michelle Venter

Subject:

FW: Background Information Document, Barberton Mines (Pty) Ltd: Fairview project.

Attachments:

Fairview\_BID-English\_V4.pdf

Dear Michelle

Please engage our Mpumalanga Regional office in this regard.

### Andre Eagar

Communication Tel: 012 444 3231

Email: Andre.Eagar@dmr.gov.za

Website: www.dmr.gov.za











From: Michelle Venter [mailto:Michelle@cabangaconcepts.co.za]

Sent: Wednesday, November 06, 2019 2:48 PM

Subject: Background Information Document, Barberton Mines (Pty) Ltd: Fairview project.

Good day,

Please find attached Background Information Document in English for Barberton Mines (Pty) Ltd: Fairview project. Due to mailbox constraints the next email will have the SiSwati Background Information Document.

Should you have any queries please email: lelani@cabangaenvironmental.co.za

Thank you

Kind regards,

From:

Siyabulela Kobese <SiyabulelaK@daff.gov.za>

Sent:

06 November 2019 04:26 PM

To:

Zinzile Mtotywa

Cc:

Michelle Venter

Subject:

FW: Background Information Document, Barberton Mines (Pty) Ltd: Fairview project.

Attachments:

Fairview\_BID-English\_V4.pdf

Hi Zinzile

Kindly attend to this email.

Regards,

Siyabulela M Kobese

Deputy Director: Forestry Regulations Support (MP) Directorate: Forestry Management Limpopo-Mpumalanga

Department of Agriculture, Forestry & Fisheries

Cell:

082 886 2334 013 754 0758

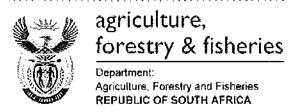
Tel: Fax:

086 758 5765

web:

www.daff.gov.za

E-mail: SiyabulelaK@daff.gov.za



From: Michelle Venter [mailto:Michelle@cabangaconcepts.co.za]

Sent: 06 November 2019 02:48 PM

Subject: Background Information Document, Barberton Mines (Pty) Ltd: Fairview project.

Good day,

Please find attached Background Information Document in English for Barberton Mines (Pty) Ltd: Fairview project. Due to mailbox constraints the next email will have the SiSwati Background Information Document.

Should you have any queries please email:

lelani@cabangaenvironmental.co.za

Thank you

From:

Mail Delivery System <Mailer-Daemon@mail.vox,co,za>

Sent:

06 November 2019 03:29 PM

To:

Michelle Venter

Subject:

Mail delivery failed: returning message to sender

This message was created automatically by mail delivery software.

A message that you sent could not be delivered to one or more of its recipients. This is a permanent error. The following address(es) failed:

tonyferrar@lantic.net Unrouteable address

----- This is a copy of the message, including all the headers. -----

----- The body of the message is 2239746 characters long; only the first

---- 106496 or so are included here.

Return-path: <Michelle@cabangaconcepts.co.za>

Received: from alteonadmin.datapro.co.za ([196.41.30.114]:13202 helo=fortimail-02.voxtelecom.co.za)

by mail.vox.co.za with esmtps (TLSv1.2:DHE-RSA-AES256-SHA256:256)

(Exim 4.82 (FreeBSD))

(envelope-from < Michelle@cabangaconcepts.co.za>)

id 1iSLMN-000AZS-7d

for tonyferrar@lantic.net; Wed, 06 Nov 2019 15:28:31 +0200

Received: from mail-filter-04.dotnetwork.co.za (mail-filter-04.dotnetwork.co.za [154.66.66.114])

by fortimail-02.voxtelecom.co.za with ESMTP id xA6DSTeB030006-xA6DSTeD030006

(version=TLSv1.2 cipher=ECDHE-RSA-AES256-GCM-SHA384 bits=256 verify=NO)

for <tonyferrar@lantic.net>; Wed, 6 Nov 2019 15:28:29 +0200

Received: from gmtxs30.dotnetwork2.co.za ([154.66.66.88] helo=smtp2.dotnetwork2.co.za)

by mail-filter-04.dotnetwork.co.za with esmtps (TLSv1.2:ECDHE-RSA-AES256-SHA384:256)

(Exim 4.89)

(envelope-from < Michelle@cabangaconcepts.co.za>)

id 1iSKn3-0007gl-NG; Wed, 06 Nov 2019 14:52:21 +0200

Received: from HUB28.GMS.local (10.2.203.34) by HUB20.GMS.local (10.2.203.129)

with Microsoft SMTP Server (TLS) id 14.3.468.0; Wed, 6 Nov 2019 14:51:03

+0200

Received: from MBX60.GMS.local ([169.254.1.141]) by HUB28.GMS.local

([10.2.203.34]) with mapi id 14.03.0468.000; Wed, 6 Nov 2019 14:50:57 +0200

From: Michelle Venter < Michelle@cabangaconcepts.co.za>

Subject: Background Information Document, Barberton Mines (Pty) Ltd:

Fairview project SiSwati

Thread-Topic: Background Information Document, Barberton Mines (Pty) Ltd:

Fairview project SiSwati

Thread-Index: AdWUoJsJfQojWxUdROO2qY4bg5BY0g== Return-Receipt-To: <Michelle@cabangaconcepts.co.za>

Date: Wed, 6 Nov 2019 12:50:56 +0000

Message-ID: <472C9286E65F154EB694351C7B63BB0E01AB84D764@MBX60.GMS.local>

Accept-Language: en-US, en-ZA

From:

Mail Delivery System < Mailer-Daemon@mail.vox.co.za>

Sent:

06 November 2019 03:41 PM

To:

Michelle Venter

Subject:

Mail delivery failed: returning message to sender

This message was created automatically by mail delivery software.

A message that you sent could not be delivered to one or more of its recipients. This is a permanent error. The following address(es) failed:

tonyferrar@lantic.net Unrouteable address

----- This is a copy of the message, including all the headers. -----

----- The body of the message is 2603268 characters long; only the first

----- 106496 or so are included here.

Return-path: <Michelle@cabangaconcepts.co.za>

Received: from alteonadmin,datapro.co.za ([196.41.30.114]:32794 helo=fortimail-02.voxtelecom.co.za)

by mail.vox.co.za with esmtps (TLSv1.2:DHE-RSA-AES256-SHA256:256)

(Exim 4.82 (FreeBSD))

(envelope-from <Michelle@cabangaconcepts.co.za>)

id 1iSLYL-000PDZ-OG

for tonyferrar@lantic.net; Wed, 06 Nov 2019 15:40:53 +0200

Received: from mail-filter-10.dotnetwork.co.za (mail-filter-10.dotnetwork.co.za [41.77.57.132])

by fortimail-02.voxtelecom.co.za with ESMTP id xA6DeqDD003805-xA6DeqDF003805

(version=TLSv1.2 cipher=ECDHE-RSA-AES256-GCM-SHA384 bits=256 verify=NO)

for <tonyferrar@lantic.net>; Wed, 6 Nov 2019 15:40:52 +0200

Received: from gmtxs28.dotnetwork2.co.za ([154.66.66.86] helo=smtp2.dotnetwork2.co.za)

by mail-filter-10.dotnetwork.co.za with esmtps (TLSv1.2:ECDHE-RSA-AES256-SHA384:256)

(Exim 4.89)

(envelope-from < Michelle@cabangaconcepts.co.za>)

id 1iSKkp-000Ba8-24; Wed, 06 Nov 2019 14:50:13 +0200

Received: from HUB30.GMS.local (10.2.203.36) by hub18 (10.2.203.127) with

Microsoft SMTP Server (TLS) id 14.3.468.0; Wed, 6 Nov 2019 14:48:15 +0200

Received: from MBX60.GMS.local ([169.254.1.141]) by HUB30.GMS.local

([10.2.203.36]) with mapi id 14.03.0468.000; Wed, 6 Nov 2019 14:48:09 +0200

From: Michelle Venter < Michelle@cabangaconcepts.co.za>

Subject: Background Information Document, Barberton Mines (Pty) Ltd:

Fairview project.

Thread-Topic: Background Information Document, Barberton Mines (Pty) Ltd:

Fairview project.

Thread-Index: AdWUnvTk+qlOCAeUSWOc6Sg8lWBfig== Return-Receipt-To: <Michelle@cabangaconcepts.co.za>

Date: Wed, 6 Nov 2019 12:48:09 +0000

Message-ID: <472C9286E65F154EB694351C7B63BB0E01AB84D6BE@MBX60.GMS.local>

Accept-Language: en-US, en-ZA Content-Language: en-US

From:

Mail Delivery System < Mailer-Daemon@mail.vox.co.za>

Sent:

06 November 2019 03:41 PM

To:

Michelle Venter

Subject:

Mail delivery failed: returning message to sender

This message was created automatically by mail delivery software.

A message that you sent could not be delivered to one or more of its recipients. This is a permanent error. The following address(es) failed:

tonyferrar@lantic.net Unrouteable address

----- This is a copy of the message, including all the headers. -----

----- The body of the message is 2603268 characters long; only the first

----- 106496 or so are included here.

Return-path: < Michelle@cabangaconcepts.co.za>

Received: from alteonadmin.datapro.co.za ([196.41.30.114]:32794 helo=fortimail-02.voxtelecom.co.za)

by mail.vox.co.za with esmtps (TLSv1.2:DHE-RSA-AES256-SHA256:256)

(Exim 4.82 (FreeBSD))

(envelope-from < Michelle@cabangaconcepts.co.za>)

id 1iSLYL-000PDZ-OG

for tonyferrar@lantic.net; Wed, 06 Nov 2019 15:40:53 +0200

Received: from mail-filter-10.dotnetwork.co.za (mail-filter-10.dotnetwork.co.za [41.77.57.132])

by fortimail-02.voxtelecom.co.za with ESMTP id xA6DeqDD003805-xA6DeqDF003805

(version=TLSv1.2 cipher=ECDHE-RSA-AES256-GCM-SHA384 bits=256 verify=NO)

for <tonyferrar@lantic.net>; Wed, 6 Nov 2019 15:40:52 +0200

Received: from gmtxs28.dotnetwork2.co.za ([154.66.66.86] helo=smtp2.dotnetwork2.co.za)

by mail-filter-10.dotnetwork.co.za with esmtps (TLSv1.2:ECDHE-RSA-AES256-SHA384:256)

(Exim 4.89)

(envelope-from < Michelle@cabangaconcepts.co.za>)

id 1iSKkp-000Ba8-24; Wed, 06 Nov 2019 14:50:13 +0200

Received: from HUB30.GMS.local (10.2.203.36) by hub18 (10.2.203.127) with

Microsoft SMTP Server (TLS) id 14.3.468.0; Wed, 6 Nov 2019 14:48:15 +0200

Received: from MBX60.GMS.local ([169.254.1.141]) by HUB30.GMS.local

([10.2.203.36]) with mapi id 14.03.0468.000; Wed, 6 Nov 2019 14:48:09 +0200

From: Michelle Venter < Michelle@cabangaconcepts.co.za>

Subject: Background Information Document, Barberton Mines (Pty) Ltd:

Fairview project.

Thread-Topic: Background Information Document, Barberton Mines (Pty) Ltd:

Fairview project.

Thread-Index: AdWUnvTk+qlOCAeUSWOc6Sg8lWBfig== Return-Receipt-To: <Michelle@cabangaconcepts.co.za>

Date: Wed, 6 Nov 2019 12:48:09 +0000

Message-ID: <472C9286E65F154EB694351C7B63BB0E01AB84D6BE@MBX60.GMS.local>

Accept-Language: en-US, en-ZA Content-Language: en-US

From:

Mabunda Lunghile < Mabunda L@dws.gov.za>

Sent:

06 November 2019 03:30 PM

To:

Michelle Venter

Subject:

RE: Background Information Document, Barberton Mines (Pty) Ltd: Fairview project.

#### Good afternoon

Kindly note you are sending to a wrong email, I am not working in relation to the activities or projects you are sending to me

Please contact the Provincial Operations of Nelspruit or Inkomati CMA offices in Nelspruit and they will help you on whom to contact regarding your projects

Kind regards

Lunghile Mabunda (Pr.Sci.Nat)
Department of Water and Sanitation
Compliance Monitoring (Head Office)

From: Michelle Venter [mailto:Michelle@cabangaconcepts.co.za]

Sent: 06 November 2019 14:48

Subject: Background Information Document, Barberton Mines (Pty) Ltd: Fairview project.

Good day,

Please find attached Background Information Document in English for Barberton Mines (Pty) Ltd: Fairview project. Due to mailbox constraints the next email will have the SiSwati Background Information Document.

Should you have any queries please email: lelani@cabangaenvironmental.co.za

Thank you

Kind regards,



Michelle Venter (B Sc Hons.)

e: michelle@cabangaenvironmental.co.za
Unit 5 & 6 Beyers Office Park, Bosbok Road, Randpark Ridge

www.cabangaenvironmental.co.za

| From: |  |
|-------|--|

WOF Communications < comms@wofire.co.za>

Sent:

06 November 2019 11:34 PM

To:

Michelle Venter

Subject:

Re: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

### Good day Michelle

May I ask who your email is directed to or what the purpose of supplying the background info is? I would like to make sure it gets to the right person.

### Kind regards

On Wed, 6 Nov 2019 at 14:58, Michelle Venter < Michelle@cabangaconcepts.co.za > wrote:

Good day,

Please find attached Background Information Document in SiSwati for Barberton Mines (Pty) Ltd: Fairview project.

Should you have any queries please email:

lelani@cabangaenvironmental.co.za

Thank you

Kind regards,



Michelle Venter (B Sc Hons.)

e: michelle@cabangaenvironmental.co.za

Unit 5 & 6 Beyers Office Park, Bosbok Road, Randpark Ridge www.cabangaenvironmental.co.za



From:

postmaster <postmaster@voxtelecom.co.za>

To:

tonyferrar@lantic.net

Sent:

06 November 2019 03:41 PM

Subject:

Relayed: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:

tonyferrar@lantic.net

From:

postmaster < postmaster@voxtelecom.co.za>

To:

tonyferrar@lantic.net

Sent:

06 November 2019 03:29 PM

Subject:

Relayed: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:

tonyferrar@lantic.net

From:

postmaster@ehlanzeni.gov.za hshabangu@ehlanzeni.gov.za

To: Sent:

06 November 2019 05:04 PM

Subject:

Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

#### Delivery has failed to these recipients or groups:

#### hshabangu@ehlanzeni.gov.za

This message was rejected by the recipient e-mail system. Please check the recipient's e-mail address and try resending this message, or contact the recipient directly.

#### Diagnostic information for administrators:

Generating server: sehlmail01.ehlanzeni.gov.za

hshabangu@ehlanzeni.gov.za

#<#5.1.10 smtp;550  $\bar{5}.1.10$  RESOLVER.ADR.RecipientNotFound; Recipient not found by SMTP address lookup> #SMTP#

#### Original message headers:

Received: from sehlmail01.ehlanzeni.gov.za (192.6.11.249) by

sehlmail01.ehlanzeni.gov.za (192.6.11.249) with Microsoft SMTP Server

(version=TLS1\_2, cipher=TLS\_ECDHE\_RSA\_WITH\_AES\_128\_GCM\_SHA256) id

15.1.1531.3; Wed, 6 Nov 2019 17:06:34 +0200

Received: from mail-filter-10.dotnetwork.co.za (192.6.11.200) by

schlmail01.ehlanzeni.gov.za (192.6.11.249) with Microsoft SMTP Server

(version=TLS1 2, cipher=TLS\_ECDHE\_RSA\_WITH\_AES 128\_GCM\_SHA256) id 15.1.1531.3

via Frontend Transport; Wed, 6 Nov 2019 17:06:34 +0200

Received: from gmtxs28.dotnetwork2.co.za ([154.66.66.86]

helo=smtp2.dotnetwork2.co.za) by mail-filter-10.dotnetwork.co.za with esmtps

(TLSv1.2:ECDHE-RSA-AES256-SHA384:256)(Exim 4.89) (envelope-from

<Michelle@cabangaconcepts.co.za>) id 1iSKkp-000Ba8-24; Wed, 06 Nov 2019

14:50:13 +0200

Received: from HUB30.GMS.local (10.2.203.36) by hub18 (10.2.203.127) with

Microsoft SMTP Server (TLS) id 14.3.468.0; Wed, 6 Nov 2019 14:48:15 +0200

Received: from MBX60.GMS.local ([169.254.1.141]) by HUB30.GMS.local

([10.2,203.36]) with mapi id 14.03.0468.000; Wed, 6 Nov 2019 14:48:09 +0200

From: Michelle Venter < Michelle@cabangaconcepts.co.za>

Subject: Background Information Document, Barberton Mines (Pty) Ltd:

Fairview project.

Thread-Topic: Background Information Document, Barberton Mines (Pty) Ltd:

Fairview project.

From: Microsoft Outlook

<MicrosoftExchange329e71ec88ae4615bbc36ab6ce41109e@mtpa.co.za>

To:dan,mahlangu@mtpa.co.zaSent:06 November 2019 03:42 PM

Subject: Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

#### Delivery has failed to these recipients or groups:

#### dan.mahlangu@mtpa.co.za

This message was rejected by the recipient e-mail system. Please check the recipient's e-mail address and try resending this message, or contact the recipient directly.

#### Diagnostic information for administrators:

Generating server: srvnhoexc2.mtpa.local

dan.mahlangu@mtpa.co.za

#< #5.1.10 smtp;550 5.1.10 RESOLVER.ADR.RecipientNotFound; Recipient not found by SMTP address lookup> #SMTP#

Original message headers:

Received: from srvnhoexc1.mtpa.local (192.168.0.32) by SRVNHOEXC2.mtpa.local

(192.168.0.42) with Microsoft SMTP Server (version=TLS1\_2,

cipher=TLS\_ECDHE\_RSA\_WITH\_AES\_128\_GCM\_SHA256) id 15.1.1713.5; Wed, 6 Nov 2019

15:33:28 +0200

Received: from za-smtp-1.mimecast.co.za (41.0.41.234) by srvnhoexc1.mtpa.local

(192.168.0.75) with Microsoft SMTP Server id 15.1.1531.3 via Frontend

Transport; Wed, 6 Nov 2019 15:33:27 +0200

ARC-Message-Signature: i=1; a=rsa-sha256; c=relaxed/relaxed;

d=dkim.mimecast.com; s=201903; t=1573047679;

h=from:from:reply-to:subject:subject:date:date:message-id:message-id:

to:to:cc:mime-version:mime-version:content-type;content-type;

bh=DeRPAAindiKPinha2ZpyxqhaaYF3wutv8hEFo7t5yBI=;

b--mxBuwb/LQd247x7OFDNZrtg6BuquNIdr8QBYQQJ1nf8KfW732NjMDDzwjxr43aG5H6LuSw

6rH96vCtG92k2JM28zeIKBFYb1xTx/9HRjag2jvZhTR7ygNHfQKpDPWLz2iv9XKq4zY3F4

AjZWim/qGOOl63bsCI1xbD0EvkAd1TU85WWpi89deUa2PeZr1lh60UlH1OV12MJBZ4LJX1

rlxoU/c+DcR80XYq0YqkDpZMcleumEqcqWwzwnT1dsKXu95SvsW/De40onIDqT5I/WezZX

dSO6dXnOk70S3R8NkKFd3QsYha1b3YnhNLo+7YpGfKrpWxdNa0mnbFhXQW2mDQ==

ARC-Seal: i=1; s=201903; d=dkim.mimecast.com; t=1573047679; a=rsa-sha256;

cv=none;

b=i/QCgDLR5+9uJQILCQjvhVWIr+jib60J9q5uilIe2AaLXhWLmGoviBlUK4NleOuTuCJm14HPRIJU58fdWq+03ry2V3R1q7+JO1FBisDol6k8bsCJoEMWSzqQP+s/96MYwghvVa047f69

From: Mail Delivery System <Mailer-Daemon@mail-filter-10.dotnetwork.co.za>

To: bongane@umjindi.gov.za; abraham@dme.gov.za; fcebisilendwandwe@gmail.com

**Sent:** 06 November 2019 03:10 PM

Subject: Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

### Delivery has failed to these recipients or groups:

bongane@umjindi.gov.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

abraham@dme.gov.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

fcebisilendwandwe@gmail.com

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

The following organization rejected your message: gmail-smtp-in.l.google.com.

#### Diagnostic information for administrators:

Generating server: mail-filter-10.dotnetwork.co.za

bongane@umjindi.gov.za

gmail-smtp-in.l.google.com #< #5.0.0 smtp; Unrouteable address> #SMTP#

abraham@dme.gov.za

gmail-smtp-in.l.google.com #< #5.0.0 smtp; Unrouteable address> #SMTP#

fcebisilendwandwe@gmail.com

gmail-smtp-in.l.google.com #<gmail-smtp-in.l.google.com #5.0.0 smtp; 550-5.1.1 The email account that you tried to reach does not exist. Please try 550-5.1.1 double-checking the recipient's email address for typos or 550-5.1.1 unnecessary spaces. Learn more at 550 5.1.1 https://support.google.com/mail/?p=NoSuchUser i16si23141270wrs.487 - gsmtp> #SMTP#

Original message headers:

From:

Mail Delivery System <MAILER-DAEMON@spamwall.soft.co.za>

To:

bjbird@soft.co.za

Sent:

06 November 2019 03:00 PM

Subject:

Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

### Delivery has failed to these recipients or groups:

#### bjbird@soft.co.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

#### Diagnostic information for administrators:

Generating server: spamwall.soft.co.za

#### bjbird@soft.co.za

#< #5.0.0 X-SpamWall; host dvorak.soft.co.za[160.119.102.160] said: 550 Requested action not taken: mailbox unavailable or not local. (in reply to RCPT TO command)> #SMTP#

#### Original message headers:

Received: from localhost (spamwall.soft.co.za [216.55.102.109]) by

spamwall.soft.co.za (SpamWall) with ESMTP id DC8B15C22915 for

<br/>
<br/>
<br/>
dipird@soft.co.za>; Wed, 6 Nov 2019 14:59:42 +0200 (SAST)

X-SPAM-VIRUS-Scanned: Anti-Spam Firewall Ver 4.1 at spamwall.soft.co.za

Received: from spamwall.soft.co.za ([216,55,102,109]) by localhost

(spamwall.soft.co.za [216.55.102.109]) (spamwall, port 10024) with ESMTP id

GrWgZi7H4oZ1 for <bibird@soft.co.za>; Wed, 6 Nov 2019 14:59:41 +0200 (SAST)

Received: from mail-filter-10.dotnetwork.co.za

(mail-filter-10.dotnetwork.co.za [41.77.57.132]) by spamwall.soft.co.za

(SpamWall) with ESMTP id ED41F5C228F6 for <br/>
spird@soft.co.za>; Wed, 6 Nov

2019 14:59:35 +0200 (SAST)

Received; from gmtxs28.dotnetwork2.co.za ([154.66.66.86]

helo=smtp2.dotnetwork2.co.za) by mail-filter-10.dotnetwork.co.za with esmtps

(TLSv1.2:ECDHE-RSA-AES256-SHA384:256)(Exim 4.89) (envelope-from

<Michelle@cabangaconcepts.co.za>) id 1iSKkp-000Ba8-24; Wed, 06 Nov 2019

14:50:13 +0200

Received: from HUB30.GMS.local (10.2.203.36) by hub18 (10.2.203.127) with Microsoft SMTP Server (TLS) id 14.3.468.0; Wed, 6 Nov 2019 14:48:15 +0200

Received: from MBX60.GMS.local ([169.254.1.141]) by HUB30.GMS.local

([10.2,203,36]) with mapi id 14.03.0468.000; Wed, 6 Nov 2019 14:48:09 +0200

From: Michelle Venter < Michelle@cabangaconcepts.co.za>

Subject: Background Information Document, Barberton Mines (Pty) Ltd:

From:

postmaster@daff.gov.za mikeme@nda.agric.za

To: Sent:

06 November 2019 02:57 PM

Subject:

Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

### Delivery has failed to these recipients or groups:

#### mikeme@nda.agric.za

The e-mail address you entered couldn't be found. Please check the recipient's e-mail address and try to resend the message. If the problem continues, please contact your helpdesk.

### Diagnostic information for administrators:

Generating server: StellenboschExc.nda.agric.za

mikeme@nda.agric.za

#< #5.1.1 smtp;550 5.1.1 RESOLVER.ADR.RecipNotFound; not found> #SMTP#

Original message headers:

Received: from Ptaexcha4.nda.agric.za (2002:9bf0:9550::9bf0:9550) by

StellenboschExc.nda.agric.za (2002:9bf0:9462::9bf0:9462) with Microsoft SMTP

Server (TLS) id 15.0.1473.3; Wed, 6 Nov 2019 14:56:14 +0200

Received: from agrimx2.nda.agric.za (192.96.1.11) by Ptaexcha4.nda.agric.za

(155.240.149.80) with Microsoft SMTP Server (TLS) id 15.0.1473.3 via Frontend

Transport; Wed, 6 Nov 2019 14:56:13 +0200

Received: from cluster-s.maikcontrol.com (unknown [196.216.238.190]) by

Forcepoint Email with ESMTPS id 05F952850BC60A0F1705 for

<mikeme@nda.agric.za>; Wed, 6 Nov 2019 14:57:36 +0200 (CAT)

Received: from rly11s.srv.mailcontrol.com (localhost [127.0.0.1])by

rly11s.srv.mailcontrol.com (MailControl) with ESMTP id xA6Ctsrj097188 for

<mikeme@nda.agric.za>; Wed, 6 Nov 2019 12:55:54 GMT

Received: from localhost.localdomain (localhost.localdomain [127.0.0.1]) by

rly11s.srv.mailcontrol.com (MailControl) id xA6CtsM2097088 for

<mikeme@nda.agric.za>; Wed, 6 Nov 2019 12:55:54 GMT

Received: from mail-filter-10.dotnetwork.co.za

(mail-filter-10.dotnetwork.co.za [41.77.57.132]) by

rlv11s-eth0.srv.mailcontrol.com (envelope-sender

<Michelle@cabangaconcepts.co.za>) (MIMEDefang) with ESMTP id xA6CtqKL096144

(TLS bits=256 verify=NO); Wed, 06 Nov 2019 12:55:54 +0000 (GMT)

Received: from gmtxs28.dotnetwork2.co.za ([154.66.66.86]

helo=smtp2.dotnetwork2.co.za) by mail-filter-10.dotnetwork.co.za with esmtps

(TLSv1.2:ECDHE-RSA-AES256-SHA384:256)(Exim 4.89) (envelope-from

From:

postmaster@energy.gov.za

To:

kate.dire@energy.gov.za 06 November 2019 02:54 PM

Sent: Subject:

Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

### Delivery has failed to these recipients or groups:

#### kate.dire@energy.gov.za

The e-mail address you entered couldn't be found. Please check the recipient's e-mail address and try to resend the message. If the problem continues, please contact your helpdesk.

#### Diagnostic information for administrators:

Generating server: energy.gov.za

kate.dire@energy.gov.za

#< #5.1.1 smtp;550 5.1.1 RESOLVER.ADR.RecipNotFound; not found> #SMTP#

Original message headers:

Received: from mx1.energy.gov.za (10.123.220.194) by combustion.energy.gov.za (10.101.209.249) with Microsoft SMTP Server id 14.3.468.0; Wed, 6 Nov 2019

14:52:37 +0200

Received: from securemail-pl-mx6.synaq.com ([196.35.198.146]) by mx1.energy.gov.za with esmtp (Exim 4.89 (FreeBSD)) (envelope-from

<Michelle@cabangaconcepts.co.za>) id 1iSJXA-0006Fh-2Y for

kate.dire@energy.gov.za; Wed, 06 Nov 2019 13:31:32 +0200

Received: from mail-filter-10.dotnetwork.co.za ([41.77.57.132]) by

securemail-pi-mx6.synaq.com with esmtps

(TL5v1.2:DHE-RSA-AES256-GCM-SHA384:256) (Exim 4.92.3) (envelope-from <Michelle@cabangaconcepts.co.za>) id 1iSKns-000R2p-31; Wed, 06 Nov 2019 14:52:52 +0200

Received: from gmtxs28.dotnetwork2.co.za ([154.66.66.86]

helo=smtp2.dotnetwork2.co.za) by mail-filter-10.dotnetwork.co.za with esmtps

(TLSv1.2:ECDHE-RSA-AES256-SHA384:256)(Exim 4.89) (envelope-from

<Michelle@cabangaconcepts.co.za>) id 1iSKkp-000Ba8-24; Wed, 06 Nov 2019

14:50:13 +0200

Received: from HUB30.GMS.local (10.2.203.36) by hub18 (10.2.203.127) with Microsoft SMTP Server (TLS) id 14.3.468.0; Wed, 6 Nov 2019 14:48:15 +0200

Received: from MBX60.GMS.local ([169.254.1.141]) by HUB30.GMS.local

([10.2,203,36]) with mapi id 14.03.0468.000; Wed, 6 Nov 2019 14:48:09 +0200

From: Michelle Venter < Michelle@cabangaconcepts.co.za>

Subject: Background Information Document, Barberton Mines (Pty) Ltd:

From:

Mail Delivery System < Mailer-Daemon@gbr1.gov.za>

To:

SHlatswayo@mpg.gov.za; vilakazisf@mpg.gov.za; nndlanya@mpg.gov.za;

smaluleka@mpg.gov.za; selvy@mpg.gov.za

Sent:

06 November 2019 02:54 PM

Subject:

Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

## Delivery has failed to these recipients or groups:

SHlatswayo@mpg.gov.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

vilakazisf@mpq.qov.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

nndlanya@mpg.gov.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

smaluleka@mpq.gov.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

selvy@mpg.gov.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

The following organization rejected your message: gwia.mpg.gov.za.

### Diagnostic information for administrators:

Generating server: gbr1.gov.za

SHlatswayo@mpg.gov.za

gwia.mpg.gov.za #<gwia.mpg.gov.za #5.0.0 smtp; 550 No such recipient> #SMTP#

From:

Microsoft Outlook

To:

nlmufumadi@ruraldevelopment.gov.za

Sent:

06 November 2019 02:48 PM

Subject:

Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

### Delivery has failed to these recipients or groups:

nlmufumadi@ruraldevelopment.gov.za (nlmufumadi@ruraldevelopment.gov.za)

The e-mail address you entered couldn't be found. Please check the recipient's e-mail address and try to resend the message. If the problem continues, please contact your helpdesk.

#### Diagnostic information for administrators:

Generating server: HUB30.GMS.local

nlmufumadi@ruraldevelopment.gov.za

#550 5.1.1 RESOLVER.ADR.RecipNotFound; not found ##

Original message headers:

Received: from MBX60.GMS.local ([169.254.1.141]) by HUB30.GMS.local

([10.2,203.36]) with mapi id 14.03.0468.000; Wed, 6 Nov 2019 14:48:09 +0200

Content-Type: application/ms-tnef; name="winmail.dat"

Content-Transfer-Encoding: binary

From: Michelle Venter < Michelle@cabangaconcepts.co.za >

Subject: Background Information Document, Barberton Mines (Pty) Ltd:

Fairview project.

Thread-Topic: Background Information Document, Barberton Mines (Pty) Ltd:

Fairview project.

Thread-Index: AdWUnvTk+qlOCAeUSWOc6Sg8lWBfig== Return-Receipt-To: < <a href="mailto:Michelle@cabangaconcepts.co.za">Michelle@cabangaconcepts.co.za</a>

Date: Wed, 6 Nov 2019 14:48:09 +0200

Message-ID: <472C9286E65F154EB694351C7B63BB0E01AB84D6BE@MBX60.GMS.local>

Accept-Language: en-US, en-ZA Content-Language: en-US X-MS-Has-Attach: yes

X-MS-TNEF-Correlator: < 472C9286E65F154EB694351C7B63BB0E01AB84D6BE@MBX60.GMS.local>

MIME-Version: 1.0

X-Originating-IP: [10.2.203.81]

X-EXCLAIMER-MD-CONFIG: 4ff128d7-9096-41f8-878c-9b55c0a544fe

X-ExSBR-Sender: michelle@cabangaconcepts.co.za

X-ExSBR-Organization: gms.local

From:

Microsoft Outlook

To:

Khethiwe.malaza@mbombela.gov.za.

Sent:

06 November 2019 02:48 PM

Subject:

Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

# Delivery has failed to these recipients or groups:

#### Khethiwe,malaza@mbombela.gov.za.

The format of the e-mail address isn't correct, A correct address looks like this: someone@example.com. Please check the recipient's e-mail address and try to resend the message.

#### Diagnostic information for administrators:

Generating server: HUB30.GMS.local

#### Khethiwe.malaza@mbombela.gov.za.

#550 5.1.3 STOREDRV.Submit; invalid recipient address #SMTP#

#### Original message headers:

Received: from MBX60.GMS.local ([169.254.1.141]) by HUB30.GMS.local

([10.2.203.36]) with mapi id 14.03.0468.000; Wed, 6 Nov 2019 14:48:09 +0200

Content-Type: application/ms-tnef; name="winmail.dat"

Content-Transfer-Encoding: binary

From: Michelle Venter < Michelle@cabangaconcepts.co.za >

Subject: Background Information Document, Barberton Mines (Pty) Ltd:

Fairview project.

Thread-Topic: Background Information Document, Barberton Mines (Pty) Ltd:

Fairview project.

Thread-Index: AdWUnvTk+glOCAeUSWOc6Sg8lWBfig== Return-Receipt-To: < Michelle@cabangaconcepts.co.za >

Date: Wed, 6 Nov 2019 14:48:09 +0200

Message-ID: <472C9286E65F154EB694351C7B63BB0E01AB84D6BE@MBX60.GMS.local>

Accept-Language: en-US, en-ZA Content-Language: en-US

X-MS-Has-Attach: yes

X-MS-TNEF-Correlator: <472C9286E65F154EB694351C7B63BB0E01AB84D6BE@MBX60.GMS.local>

MIME-Version: 1.0

X-Originating-JP: [10.2.203.81]

From:

Mail Delivery System < Mailer-Daemon@securemail-pl-mx10.synaq.com>

To:

mnugunib@dwaf.gov.za 06 November 2019 05:12 PM

Sent: Subject:

Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project.

# Delivery has failed to these recipients or groups:

mnugunib@dwaf.gov.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

The following organization rejected your message: mx1.dwa.gov.za.

# Diagnostic information for administrators:

Generating server: securemail-pt-mx10.synaq.com

mnugunib@dwaf.gov.za

mx1.dwa.gov.za #<mx1.dwa.gov.za #5.0.0 smtp; 554 5.4.6 Hop count exceeded - possible mail loop> #SMTP#

Original message headers:

Return-Path: <Michelle@cabangaconcepts.co.za>

Received: from securemail-y13.synaq.com ([196.35.198.59])

by securemail-pl-mx10.synaq.com with esmtps (TLSv1.2:DHE-RSA-AES256-GCM-SHA384:256)

(Exim 4.92.3)

(envelope-from <Michelle@cabangaconcepts.co.za>)

id 1iSMxk-000So0-3h

for mnugunib@dwaf.gov.za; Wed, 06 Nov 2019 17:11:12 +0200

Received: from [164.151.129.98] (helo=CENWEXC103.dwa.gov.za)

by securemail-pl-omx7.synaq.com with esmtp (Exim 4.92.3)

(envelope-from < Michelle@cabangaconcepts.co.za > )

id 1iSMxg-000oPj-TQ

for mnugunib@dwaf.gov.za; Wed, 06 Nov 2019 17:11:09 +0200

Received: from securemail-pl-mx25.synaq.com (10.123.198.13) by

CENWEXC103.dwa.gov.za (10.123.57.126) with Microsoft SMTP Server (TLS) id

14.3.408.0; Wed, 6 Nov 2019 16:55:06 +0200

Received: from securemail-y17.synaq.com ([196.35.198.77]) by

securemail-pl-mx25.synaq.com with esmtps

(TLSv1.2:DHE-RSA-AES256-GCM-SHA384:256) (Exim 4.92.3) (envelope-from

<Michelle@cabangaconcepts.co.za>) id 1iSMi0-000mbi-Lafor

mnuqunib@dwaf.gov.za; Wed, 06 Nov 2019 16:54:56 +0200

Received: from [164.151.129.98] (helo=CENWEXC103.dwa.gov.za) by

From:

postmaster@ehlanzeni.gov.za

To: Sent: hshabangu@ehlanzeni.gov.za 06 November 2019 04:10 PM

Subject:

Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

#### Delivery has failed to these recipients or groups:

#### hshabangu@ehlanzeni.gov.za

This message was rejected by the recipient e-mail system. Please check the recipient's e-mail address and try resending this message, or contact the recipient directly.

#### Diagnostic information for administrators:

Generating server: sehlmail01.ehlanzeni.gov.za

hshabangu@ehlanzeni.gov.za

#< #5.1.10 smtp;550 5.1.10 RESOLVER.ADR.RecipientNotFound; Recipient not found by SMTP address lookup> #SMTP#

# Original message headers:

Received: from sehlmail01.ehlanzeni.gov.za (192.6.11.249) by

sehlmail01.ehlanzeni.gov.za (192.6.11.249) with Microsoft SMTP Server

(version=TLS1\_2, cipher=TLS\_ECDHE\_RSA\_WITH\_AES\_128\_GCM\_SHA256) id

15.1.1531.3; Wed, 6 Nov 2019 16:13:00 +0200

Received: from mail-filter-04.dotnetwork.co.za (192.6.11.200) by

sehlmail01.ehlanzeni.gov.za (192.6.11.249) with Microsoft SMTP Server

(version-TLS1\_2, cipher=TLS\_ECDHE\_RSA\_WITH\_AES\_128\_GCM\_SHA256) id 15.1.1531.3

via Frontend Transport; Wed, 6 Nov 2019 16:13:00 +0200

Received: from gmtxs30.dotnetwork2.co.za ([154.66.66.88]

helo=smtp2.dotnetwork2.co.za) by mail-filter-04.dotnetwork.co.za with esmtps

(TLSv1.2:ECDHE-RSA-AES256-SHA384:256)(Exim 4.89) (envelope-from

<Michelle@cabangaconcepts.co.za>) id 1iSKn3-0007gI-NG; Wed, 06 Nov 2019

14:52:21 +0200

Received: from HUB28.GMS.local (10.2,203.34) by HUB20.GMS.local (10.2,203.129)

with Microsoft SMTP Server (TLS) id 14.3.468.0; Wed, 6 Nov 2019 14:51:03

+0200

Received: from MBX60.GMS.local ([169,254.1.141]) by HUB28.GMS.local

([10.2,203,34]) with mapi id 14.03.0468.000; Wed, 6 Nov 2019 14:50:57 +0200

From: Michelle Venter < Michelle@cabangaconcepts.co.za>

Subject: Background Information Document, Barberton Mines (Pty) Ltd:

Fairview project\_SiSwati

Thread-Topic: Background Information Document, Barberton Mines (Pty) Ltd:

From: Mail Delivery System <Mailer-Daemon@mail-filter-04.dotnetwork.co.za>

To: marisa.coetzee@mtpa.co.za
Sent: 06 November 2019 03:45 PM

Subject: Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

## Delivery has failed to these recipients or groups:

#### marisa.coetzee@mtpa.co.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

The following organization rejected your message: za-smtp-inbound-2.mimecast.co.za.

#### Diagnostic information for administrators:

Generating server: mail-filter-04.dotnetwork.co.za

marisa.coetzee@mtpa.co.za

za-smtp-inbound-2.mimecast.co.za #<za-smtp-inbound-2.mimecast.co.za #5.0.0 smtp; 550 Invalid Recipient - https://community.mimecast.com/docs/DOC-1369#550 [I3jjV3UROkK3S7rxTUJ\_Jq.za81]> #SMTP#

Original message headers:

Return-Path: <Michelle@cabangaconcepts.co.za>

Received: from gmtxs30.dotnetwork2.co.za ([154.66.66.88] helo=smtp2.dotnetwork2.co.za) by mail-filter-04.dotnetwork.co.za with esmtps (TESv1.2:ECDHE-RSA-AES256-SHA384:256)

(Exim 4.89)

(envelope-from <Michelle@cabangaconcepts.co.za>)

id 1iSKn3-0007gI-NG; Wed, 06 Nov 2019 14:52:21 +0200

Received: from HUB28.GMS.local (10.2.203.34) by HUB20.GMS.local (10.2.203.129)

with Microsoft SMTP Server (TLS) id 14.3.468.0; Wed, 6 Nov 2019 14:51:03

+0200

Received: from MBX60.GMS.local ([169.254.1.141]) by HUB28.GMS.local

([10.2.203.34]) with mapi id 14.03.0468.000; Wed, 6 Nov 2019 14:50:57 +0200

From: Michelle Venter < Michelle@cabangaconcepts.co.za>

Subject: Background Information Document, Barberton Mines (Pty) Ltd:

Fairview project\_SiSwati

Thread-Topic: Background Information Document, Barberton Mines (Pty) Ltd:

Fairview project\_SiSwati

Thread-Index: AdWUoJsJfQojWxUdROO2qY4bg5BY0g== Return-Receipt-To: <Michelle@cabangaconcepts.co.za>

Date: Wed, 6 Nov 2019 12:50:56 +0000

Message-ID: <472C9286E65F154EB694351C7B63BB0E01AB84D764@MBX60.GMS.local>

From:

postmaster@transnet.net

To:

bonginkosi.masuku@transnet.net

Sent:

06 November 2019 03:33 PM

Subject:

Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Delivery has failed to these recipients or groups:

#### bonginkosi.masuku@transnet.net

The recipient's mailbox is full and can't accept messages now. Please try resending this message later, or contact the recipient directly.

The following organization rejected your message: JHBWEXDSI109.inter.transnet.net.

#### Diagnostic information for administrators:

Generating server: JHBWEXDSI109.inter.transnet.net

#### bonginkosi.masuku@transnet.net

20.52176:000FC18503004010F1030000, 20.50032:000FC18573174010F1030000, 255.23226:79210000, 255.27962:FE000000, 255.17082:DD040000, 0.26937:00000000, 4.21921:DD040000, 255.27962:FA000000,

255.1494:00000000, 0.50608;0F010480,

5.29818:0000000064353666333433302D626331642D343465392D396432322D63383963363731303461393800000780, 1.29920:03000000, 7.29828:70643180000000001A010480, 7.29832:000000800000001A010480, 4.45884:DD040000,

4.29880:DD040000, 1.36108:03000000, 4.29888:DD040000, 1.56872:FE000000, 4.42712:DD040000,

5.10786:0000000031352E30302E313437332E3030333A4A48425745 584453493130390005000780, 255.1750:000FC185,

0.26849:00000000, 255.21817:DD040000, 0.26297:0A000000, 4.16585:DD040000, 0.32441:0E000000,

4.1706:DD040000, 0.24761:0E000000, 4.20665:DD040000, 0.25785:0E000000, 4.29881:DD040000 [Stage:

CreateSession]> #SMTP#

#### Original message headers:

Received: from JHBWEXDSI106.inter.transnet.net (10,98,237.9) by

JHBWEXDSI109.inter.transnet.net (10.98.237.15) with Microsoft SMTP Server

(TLS) id 15.0.1473.3; Wed, 6 Nov 2019 15:28:16 +0200

Received: from za-smtp-1.mimecast.co.za (10.98.237.103) by smtp.transnet.net (10.98.237.9) with Microsoft SMTP Server (TLS) id 15.0.1473.3 via Frontend

Transport; Wed, 6 Nov 2019 15:28:16 +0200

ARC-Message-Signature: i=1; a=rsa-sha256; c=relaxed/relaxed;

From:

Microsoft Outlook

<MicrosoftExchange329e71ec88ae4615bbc36ab6ce41109e@mtpa.co.za>

To:

dan.mahlangu@mtpa.co.za 06 November 2019 03:29 PM

Sent: Subject:

Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Delivery has failed to these recipients or groups:

#### dan.mahlangu@mtpa.co.za

This message was rejected by the recipient e-mail system. Please check the recipient's e-mail address and try resending this message, or contact the recipient directly.

#### Diagnostic information for administrators:

Generating server: srvnhoexc2.mtpa.local

dan.mahlangu@mtpa.co.za

#< #5.1.10 smtp;550 5.1.10 RESOLVER.ADR.RecipientNotFound; Recipient not found by SMTP address lookup> #SMTP#

Original message headers:

Received: from srvnhoexc1.mtpa.local (192.168.0.32) by SRVNHOEXC2.mtpa.local

(192.168.0.42) with Microsoft SMTP Server (version=TLS1-2,

cipher=TLS\_ECDHE\_RSA\_WITH\_AES\_128\_GCM\_SHA256) id 15.1.1713.5; Wed, 6 Nov 2019

15:19:56 +0200

Received: from za-smtp-1.mimecast.co.za (41.0.41.234) by srvnhoexc1.mtpa.local

(192.168.0.75) with Microsoft SMTP Server id 15.1.1531.3 via Frontend

Transport; Wed, 6 Nov 2019 15:19:54 +0200

ARC-Message-Signature: i=1; a=rsa-sha256; c=relaxed/relaxed;

d=dkim.mimecast.com; s=201903; t=1573046867;

h-from:from:reply-to:subject:subject:date:date:message-id:message-id:

to:to:co:mime-version:mime-version:content-type:content-type;

bh=eu4NsI7BXbSJZvZK0+E/wnfPs6WgkV2Zc3o6lbfsQNk=;

b=nXXRib0AGcNCBmZqCivHa3qPKMTFeJsKif3kkvMFsbW3v9cPwioZTIvutlCNh5euHwp6jB

jJVQ4WdNiZgeGJMYnMFFpwEPsNNiV8M2Obwjai2ShVlPhcbD2Ff59Uon+k4uZEB1hhZWQo

L0Z4bycfWSdrbW/HLR8SUlWTbtSDIID9bmzZc9Zmyv1Wvu+uTJTWlaxvr/zUDo+/LoSbCi

9thZODT112+9cCVbSaJel/TBAg7PkubSxP7NZ7KMR5n0fZ+b3a4dTiv8fR7GifC0VS4cjA

ARC-Seal: i=1; s=201903; d=dkim.mimecast.com; t=1573046867; a=rsa-sha256;

cv=none;

b=LNS1joN/NBflI9UpuWh2opbNXYZ-rdMLI9yniKex/UBP4GNDs4zGLyojbs4EaZBvPoMtes/O

EvXzrIqU9hNvUBdlthdzAMskHjJeqEsFt7+i2K7ETNWCol5bbcj7+IYUt7PbiEqCqhYie6

From:

Mail Delivery System <Mailer-Daemon@mail-filter-04.dotnetwork.co.za>

To:

bongane@umjindi.gov.za; abraham@dme.gov.za; fcebisilendwandwe@gmail.com

Sent:

06 November 2019 03:10 PM

Subject:

Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Delivery has failed to these recipients or groups:

bongane@umjindi.gov.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

abraham@dme.gov.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

fcebisilendwandwe@gmail.com

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

The following organization rejected your message: gmail-smtp-in.l.google.com.

#### Diagnostic information for administrators:

Generating server: mail-filter-04.dotnetwork.co.za

bongane@umjindi.gov.za

gmail-smtp-in.l.google.com #< #5.0.0 smtp; Unrouteable address> #SMTP#

abraham@dme.gov.za

qmail-smtp-in.l.google.com #< #5.0.0 smtp; Unrouteable address> #SMTP#

fcebisilendwandwe@gmail.com

grnail-smtp-in.l.google.com #<gmail-smtp-in.l.google.com #5.0.0 smtp; 550-5.1.1 The email account that you tried to reach does not exist. Please try 550-5.1.1 double-checking the recipient's email address for typos or 550-5.1.1 unnecessary spaces. Learn more at 550-5.1.1 https://support.google.com/mail/?p=NoSuchUser a202si2336759wmd.126 - gsmtp> #SMTP#

Original message headers:

From:

Mail Delivery System <MAILER-DAEMON@spamwall.soft.co.za>

To:

bibird@soft.co.za

Sent:

06 November 2019 03:02 PM

Subject:

Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Delivery has failed to these recipients or groups:

bjbird@soft.co.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

# Diagnostic information for administrators:

Generating server: spamwall.soft.co.za

bjbird@soft.co.za

#< #5.0.0 X-SpamWall; host dvorak.soft.co.za[160.119.102.160] said: 550 Requested action not taken: mailbox unavailable or not local. (in reply to RCPT TO command)> #SMTP#

Original message headers:

Received: from localhost (spamwall.soft.co.za [216.55.102.109]) by spamwall.soft.co.za (SpamWall) with ESMTP id AA2655C22A2B for <br/>
<br/>
bjbird@soft.co.za>; Wed, 6 Nov 2019 15:01:51 +0200 (SAST)

X-SPAM-VIRUS-Scanned: Anti-Spam Firewall Ver 4.1 at spamwall.soft.co.za

Received: from spamwall.soft.co.za ([216.55.102.109]) by localhost

(spamwall.soft.co.za [216.55.102.109]) (spamwall, port 10024) with ESMTP id

ETT9vQKcZD5A for <bjbird@soft.co.za>; Wed, 6 Nov 2019 15:01:50 +0200 (SAST)

Received: from mail-filter-04.dotnetwork.co.za

(mail-filter-04.dotnetwork.co.za [154.66.66.114]) by spamwall.soft.co.za

(SpamWall) with ESMTP id CD8455C22915 for <br/>
spirid@soft.co.za>; Wed, 6 Nov

2019 15:01:45 +0200 (SAST)

Received: from gmtxs30.dotnetwork2.co.za ([154.66.66.88]

helo-smtp2.dotnetwork2.co.za) by maif-filter-04.dotnetwork.co.za with esmtps

(TLSv1.2:ECDHE-RSA-AES256-SHA384:256)(Exim 4.89) (envelope-from

<Michelle@cabangaconcepts.co.za>) id 1iSKn3-0007gI-NG; Wed, 06 Nov 2019

14:52:21 +0200

Received: from HUB28.GMS.local (10.2.203.34) by HUB20.GMS.local (10.2.203.129)

with Microsoft SMTP Server (TLS) id 14.3.468.0; Wed, 6 Nov 2019 14:51:03

+0200

Received: from MBX60.GMS.local ([169.254.1.141]) by HUB28.GMS.local

([10.2.203.34]) with mapi id 14.03.0468.000; Wed, 6 Nov 2019 14:50:57 +0200

From: Michelle Venter < Michelle@cabangaconcepts.co.za>

From:

postmaster@daff.gov.za mikeme@nda.agric.za

To: Sent:

06 November 2019 02:59 PM

Subject:

Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Delivery has failed to these recipients or groups:

#### mikeme@nda.agric.za

This message was rejected by the recipient e-mail system. Please check the recipient's e-mail address and try resending this message, or contact the recipient directly.

# Diagnostic information for administrators:

Generating server: hhexch1.nda.agric.za

mikeme@nda.agric.za

#<#5.1.10 smtp;550 5.1.10 RESOLVER.ADR.RecipientNotFound; Recipient not found by SMTP address lookup> #SMTP#

Original message headers:

Received: from PTAEXCH3.nda.agric.za (155.240.117.192) by hhexch1.nda.agric.za

(155.240.96.104) with Microsoft SMTP Server (version=TLS1\_2,

cipher=TLS\_ECDHE\_RSA\_WITH\_AES\_256\_CBC\_SHA384) id 15.2.397.3; Wed, 6 Nov 2019

14:58:27 +0200

Received: from agrimx2.nda.agric.za (192.96.1.11) by PTAEXCH3.nda.agric.za

(155.240.117.192) with Microsoft SMTP Server (TLS) id 15.0.1473.3 via

Frontend Transport; Wed, 6 Nov 2019 14:58:06 +0200

Received: from cluster-s.mailcontrol.com (unknown [196.216.238.190]) by

Forcepoint Email with ESMTPS id B0C27E4A32A16B375FSE for

<mikeme@nda.agric.za>; Wed, 6 Nov 2019 14:59:28 +0200 (CAT)

Received: from rly13s.srv.mailcontrol.com (localhost [127.0.0.1]) by

rly13s.srv.mailcontrol.com (MailControl) with ESMTP id xA6CvoKS004148 for

<mikeme@nda.agric.za>; Wed, 6 Nov 2019 12:57:50 GMT

Received: from localhost.localdomain (localhost.localdomain [127.0.0.1]) by

rly13s.srv.mailcontrol.com (MailControl) id xA6Cvo9Q004093 for

<mikeme@nda.agric.za>; Wed, 6 Nov 2019 12:57:50 GMT

Received: from mail-filter-04.dotnetwork.co.za

(mail-filter-04.dotnetwork.co.za [154.66.66.114]) by

rly13s-eth0.srv.mailcontrol.com (envelope-sender

<Michelle@cabangaconcepts.co.za>) (MIMEDefang) with ESMTP id xA6CvmdA002958

(TLS bits=256 verify=NO); Wed, 06 Nov 2019 12:57:50 +0000 (GMT)

Received: from gmtxs30.dotnetwork2.co.za ([154.66.66.88]

From:

postmaster@energy.gov.za

To:

kate.dire@energy.gov.za 06 November 2019 02:56 PM

Sent: Subject:

Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project SiSwati

# Delivery has failed to these recipients or groups:

kate.dire@energy.gov.za

The e-mail address you entered couldn't be found. Please check the recipient's e-mail address and try to resend the message. If the problem continues, please contact your helpdesk.

# Diagnostic information for administrators:

Generating server: energy.gov.za

kate.dire@energy.gov.za

#< #5.1.1 smtp;550 5.1.1 RESOLVER.ADR.RecipNotFound; not found> #SMTP#

Original message headers:

Received: from mx1.energy.gov.za (10.123.220.194) by combustion.energy.gov.za (10.101.209.249) with Microsoft SMTP Server id 14.3.468.0; Wed, 6 Nov 2019

14:54:45 +0200

Received: from securemail-pl-mx25.synag.com ([196.35.198.137]) by mx1.energy.gov.za with esmtp (Exim 4.89 (FreeBSD)) (envelope from <Michelle@cabangaconcepts.co.za>) id 1iSJZE-0006YD-2C

kate.dire@energy.gov.za; Wed, 06 Nov 2019 13:33:41 ±0200

Received: from mail-filter-04.dotnetwork.co.za ([154.66.66.114]) by

securemail-pl-mx25.synag.com with esmtps

(TLSv1.2:DHE-RSA-AES256-GCM-SHA384:256) (Exim 4.92.3) (envelope-from <Michelle@cabangaconcepts.co.za>) id 1iSKpu-000C1V-HP; Wed, 06 Nov 2019 14:54:58 +0200

Received: from gmtxs30.dotnetwork2.co.za ([154.66.66.88]

by mail-filter-04.dotnetwork.co.za with esmtps helo=smtp2.dotnetwork2.co.za)

(TLSv1.2:ECDHE-RSA-AES256-SHA384:256)(Exim 4.89) (envelope-from

<Michelle@cabangaconcepts.co.za>) id 1iSKn3-0007gI-NG; Wed, 06 Nov 2019 14:52:21 +0200

Received: from HUB28.GMS.local (10.2.203.34) by HUB20.GMS.local (10.2.203.129) with Microsoft SMTP Server (TLS) id 14.3,468.0; Wed, 6 Nov 2019 14:51:03

Received: from MBX60.GMS.local ([169.254.1.141]) by HUB28.GMS.local

([10.2.203.34]) with mapi id 14.03.0468.000; Wed, 6 Nov 2019 14:50:57 +0200

From: Michelle Venter < Michelle@cabangaconcepts.co.za>

From:

Mail Delivery System <Mailer-Daemon@gbr1.gov.za>

To:

SHlatswayo@mpg.gov.za; vilakazisf@mpg.gov.za; nndlanya@mpg.gov.za;

smaluleka@mpg.gov.za; selvy@mpg.gov.za

Sent:

06 November 2019 02:56 PM

Subject:

Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Delivery has failed to these recipients or groups:

SHlatswayo@mpg.gov.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

vilakazisf@mpg.gov.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

nndlanya@mpq.gov.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

smaluleka@mpq.gov.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

selvy@mpq.qov.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

The following organization rejected your message: gwia.mpg.gov.za.

# Diagnostic Information for administrators:

Generating server: gbr1.gov.za

SHlatswayo@mpg.gov.za

gwia.mpg.gov.za # < gwia.mpg.gov.za #5.0.0 smtp; 550 No such recipient > #SMTP#

From:

Mail Delivery System <Mailer-Daemon@gbr1.gov.za>

To:

SHlatswayo@mpg.gov.za; vilakazisf@mpg.gov.za; nndlanya@mpg.gov.za;

smaluleka@mpg.gov.za; selvy@mpg.gov.za

Sent:

06 November 2019 02:56 PM

Subject:

Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Delivery has failed to these recipients or groups:

#### SHlatswayo@mpq.gov.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

#### vilakazisf@mpg.gov.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

#### nndlanya@mpg.gov.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

#### smaluleka@mpg.gov.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

#### selvy@mpq.gov.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

The following organization rejected your message: gwia.mpg.gov.za.

## Diagnostic information for administrators:

Generating server: gbr1.gov.za

SHlatswayo@mpg.gov.za

gwia.mpg.gov.za #<qwia.mpg.gov.za #5.0.0 smtp; 550 No such recipient> #SMTP#

From:

Microsoft Outlook

To:

nlmufumadi@ruraldevelopment.gov.za

Sent:

06 November 2019 02:51 PM

Subject:

Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Delivery has failed to these recipients or groups:

#### nlmufumadi@ruraldevelopment.gov.za (nlmufumadi@ruraldevelopment.gov.za)

The e-mail address you entered couldn't be found. Please check the recipient's e-mail address and try to resend the message. If the problem continues, please contact your helpdesk.

#### Diagnostic information for administrators:

Generating server: HUB28.GM\$.local

# nlmufumadi@ruraldevelopment.gov.za

#550 5.1.1 RESOLVER.ADR.RecipNotFound; not found ##

Original message headers:

Received: from MBX60.GMS.local ([169.254.1.141]) by HUB28.GMS.local

([10.2.203.34]) with mapi id 14.03.0468.000; Wed, 6 Nov 2019 14:50:57 +0200

Content-Type: application/ms-tnef; name-"winmail.dat"

Content-Transfer-Encoding: binary

From: Michelle Venter < Michelle@cabangaconcepts.co.za >

Subject: Background Information Document, Barberton Mines (Pty) Ltd:

Fairview project SiSwati

Thread-Topic: Background Information Document, Barberton Mines (Pty) Ltd:

Fairview project\_SiSwati

Thread-Index: AdWUoJsJfQojWxUdROO2qY4bg5BY0g== Return-Receipt-To: < Michelle@cabangaconcepts.co.za >

Date: Wed, 6 Nov 2019 14:50:56 +0200

Message-ID: <472C9286E65F154EB694351C7B63BB0E01AB84D764@MBX60.GMS.local>

Accept-Language: en-US, en-ZA Content-Language: en-US

X-MS-Has-Attach: yes

X-MS-TNEF-Correlator: <472C9286E65F154EB694351C7B63BB0E01AB84D764@MBX60.GMS.local>

MIME-Version: 1.0

X-Originating-IP: [10.2.203.81]

X-EXCLAIMER-MD-CONFIG: 4ff128d7-9096-41f8-878c-9b55c0a544fe

X-ExSBR-Sender: michelle@cabangaconcepts.co.za

X-ExSBR-Organization: gms.local

From:

Microsoft Outlook

To:

Khethiwe.malaza@mbombela.gov.za.

Sent:

06 November 2019 02:51 PM

Subject:

Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

# Delivery has failed to these recipients or groups:

Khethiwe.malaza@mbombela.gov.za.

The format of the e-mail address isn't correct. A correct address looks like this: someone@example.com. Please check the recipient's e-mail address and try to resend the message.

# Diagnostic information for administrators:

Generating server: HUB28.GMS.local

Khethiwe.malaza@mbombela.gov.za.

#550 5.1.3 STOREDRY.Submit; invalid recipient address #SMTP#

Original message headers:

Received: from MBX60,GMS.local ([169.254.1.141]) by HUB28.GMS.local

([10.2.203.34]) with mapi id 14.03.0468.000; Wed, 6 Nov 2019 14:50:57 +0200

Content-Type: application/ms-tnef; name="winmail.dat"

Content-Transfer-Encoding: binary

From: Michelle Venter < Michelle@cabangaconcepts.co.za>

Subject: Background Information Document, Barberton Mines (Pty) Ltd:

Fairview project SiSwati

Thread-Topic: Background Information Document, Barberton Mines (Pty) Ltd:

Fairview project\_SiSwati

Thread-Index: AdWUo.ls3fQojWxUdROO2qY4bg5BY0g== Return-Receipt-To: < Michelle@cabangaconcepts.co.za >

Date: Wed, 6 Nov 2019 14:50:56 +0200

Message-ID: <472C9286E65F154EB694351C7B63BB0E01AB84D764@MBX60.GMS.local>

Accept-Language: en-US, en-ZA Content-Language: en-US

X-MS-Has-Attach: yes

X-MS-TNEF-Correlator: < 472C9286E65F154EB694351C7B63BB0E01AB84D764@MBX60.GMS.local>

MIME-Version: 1.0

X-Originating-IP: [10.2.203.81]

From: Microsoft Outlook

To: Khethiwe.malaza@mbombela.gov.za.

06 November 2019 02:51 PM Sent:

Subject: Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project SiSwati

# Delivery has failed to these recipients or groups:

#### Khethiwe.malaza@mbombela.gov.za.

The format of the e-mail address isn't correct. A correct address looks like this: someone@example.com. Please check the recipient's e-mail address and try to resend the message.

#### Diagnostic information for administrators:

Generating server: HUB28.GMS.local

# Khethiwe.malaza@mbombela.gov.za.

#550 5.1.3 STOREDRV.Submit; invalid recipient address #SMTP#

Original message headers:

Received: from MBX60.GMS.local ([169.254.1.141]) by HUB28.GMS.local

([10.2.203.34]) with mapi id 14.03.0468.000; Wed, 6 Nov 2019 14:50:57 +0200

Content-Type: application/ms-tnef; name="winmail.dat"

Content-Transfer-Encoding: binary

From: Michelle Venter < Michelle@cabangaconcepts.co.za >

Subject: Background Information Document, Barberton Mines (Pty) Ltd:

Fairview project\_SiSwati

Thread-Topic: Background Information Document, Barberton Mines (Pty) Ltd:

Fairview project SiSwati

Thread-Index: AdWUoJsJfQojWxUdROO2qY4bq5BY0g== Return-Receipt-To: < Michelle@cabangaconcepts.co.za >

Date: Wed, 6 Nov 2019 14:50:56 +0200

Message-ID: <472C9286E65F154EB694351C7B63BB0E01AB84D764@MBX60.GMS.local>

Accept-Language: en-US, en-ZA Content-Language: en-US X-MS-Has-Attach: yes

X-MS-TNEF-Correlator: <472C9286E65F154EB694351C7B63BB0E01AB84D764@MBX60.GMS.local>

MIME-Version: 1.0

X-Originating-IP: [10.2.203.81]

From: Mail Delivery System <Mailer-Daemon@securemail-pl-mx25.synaq.com>

To:mnugunib@dwaf.gov.zaSent:06 November 2019 05:12 PM

Subject: Undeliverable: Background Information Document, Barberton Mines (Pty) Ltd: Fairview

project\_SiSwati

#### Delivery has failed to these recipients or groups:

#### mnugunib@dwaf.qov.za

A problem occurred during the delivery of this message to this e-mail address. Try sending this message again. If the problem continues, please contact your helpdesk.

The following organization rejected your message: mx1.dwa.gov.za.

#### Diagnostic information for administrators:

Generating server: securemail-pl-mx25.synaq.com

mnugunib@dwaf.gov.za

mx1.dwa.gov.za #<mx1.dwa.gov.za #5.0.0 smtp; 554 5.4.6 Hop count exceeded - possible mail loop> #SMTP#

Original message headers:

Return-Path: <Michelle@cabangaconcepts.co.za>

Received: from securemail-y15.synag.com ([196.35.198.68])

by securemail-pl-mx25.synaq.com with esmtps (TLSv1.2:DHE-RSA-AES256-GCM-SHA384:256)

(Exim 4.92.3)

(envelope-from <Michelle@cabangaconcepts.co.za>)

id 1iSMyA-000jUa-PA

for mnugunib@dwaf.gov.za; Wed, 06 Nov 2019 17:11:38 +0200

Received: from [164.151.129.98] (helo=CENWEXC103.dwa.gov.za)

by securemail-pl-omx8.synaq.com with esintp (Exim 4.92.3)

(envelope-from <Michelle@cabangaconcepts.co.za>)

id 1iSMy8-000hcN-Lh

for mnugunib@dwaf.gov.za; Wed, 06 Nov 2019 17:11:36 +0200

Received: from securemail-pl-mx25.synag.com (10.123.198.13) by

CENWEXC103.dwa.gov.za (10.123.57.126) with Microsoft SMTP Server (TLS) id

14.3.408.0; Wed, 6 Nov 2019 16:56:20 +0200

Received: from securemail-y23.synaq.com ([196.35.198.115]) by

securemail-pl-mx25.synag.com with esmtps

(TLSv1.2:DHE-RSA-AES256-GCM-SHA384:256) (Exim 4.92.3) (envelope-from

<Michelle@cabangaconcepts.co.za>) id 1iSMjI-000T97-B2 for

mnugunib@dwaf.gov.za; Wed, 06 Nov 2019 16:56:16 +0200

Received: from [164.151.129.98] (helo=CENWEXC103.dwa.gov.za) by

# **ANNEXURE D:**

# POSTERS AND PHOTOGRAPHIC EVIDENCE THEREOF





Mine Village





Site Boundary





City of Mbombela Local Municipality

# PAN AFRICAN RESOURCES PLC: BARBERTON MINES PTY LTD: FAIRVIEW MINE APPLICATION FOR ENVIRONMENTAL AUTHORISATIONS FOR THE PROPOSED FAIRVIEW TSF AND RECLAMATION OF MATERIAL FROM HISTORIC DUMPS FAIRVIEW GOLD MINE REFERENCE NUMBER: MP/30/5/1/2/2/191MR

Barberton Mines (Pty) Ltd (BML), which forms part of Pan African Resources PLC, owns and operates the Fairview Mine near the town of Barberton, Mpumalanga. Mining in the Fairview area commenced in the 1880's.

The Mining operation comprises underground gold mining, as well as surface reclamation of Tailings material, and on-site processing. Flotation Tailings and CIL Tailings are produced by the Fairview Processing Plants. Tailings are currently being deposited on a Tailings Storage Facility (TSF) known as the New Bramber Tailings Dam, or BTRP TSF.

The New Bramber/BTRP TSF does not have sufficient capacity to facilitate ongoing production. BML therefore proposes to construct a new TSF at the site of the original Bramber TSF which has since been reclaimed. The new TSF will be referred to as the Fairview TSF and will be adjoining the current New Bramber TSF.

Furthermore, historical gold mining in the area has resulted in several waste dumps throughout the Fairview Mining Right Area (MRA). Many of these dumps still contain high percentages of gold. BML wishes to obtain the necessary authorizations to recover material from these historic dumps via mechanical methods and re-process the material in the existing Fairview Plant. This reprocessing has two main objectives, namely gold recovery from the deposits and environmental clean-up.

To implement the proposed projects, BML is required to apply for authorisation in terms of the following mining and environmental legislation:

- Amendment of the existing Environmental Management Plan (EMP) in terms of Section 102 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) (MPRDA);
- Environmental Authorisation for Listed Activities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), and the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended);
- A Waste Management License (WML) in terms of the National Environmental Management Waste Act, 2008 (Act No 59 of 2008) (NEMWA), and the Regulations Listing Waste Management Activities that have, or are likely to have, a detrimental effect on the environment (as amended);
- Destruction permits for heritage resources (the historic dumps are all older than 60 years) in terms of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA);
- Relocation Permits for Protected Plant Species in terms of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) (NEMBA); and
- An Integrated Water Use License (IWUL) in terms of the National Water Act, 1998 (Act No. 36 of 1998) (NWA), and the Water Use License Application (WULA) and Appeals Regulations, 2017.

PROPONENT: Barberton Mines (Pty) Ltd: Fairview Mine

**LOCATION**: The Fairview TSF is proposed at the footprint of the reclaimed Bramber TSF and adjoining the current New Bramber/BTRP TSF, at approximately 25°43'44.26"S; 31° 4'2.87"E, on the Farm Fairview 542 JU over which BML holds surface rights. The historic dumps targeted for reclamation are located at various locations within the Fairview MRA, on the Farm Sheba 940 JU, about 10km north-east of Barberton.

**APPLICATION PROCESS:** There are new Listed Activities associated with the proposed Project, that are identified in terms of Listing Notice 1, 2 and 3 of the EIA Regulations 2014 (as amended) and Category B of the List of Waste Management Activities that have, or are likely to have, a detrimental effect on the environment (as amended). A Scoping and Environmental Impact Assessment (EIA) Process is therefore relevant to the application. Cabanga Environmental has been appointed as the independent Environmental Assessment Practitioner (EAP) to complete the necessary environmental applications and the Public Participation Process.

Fairview Mine has an existing approved Water Use License (WUL) issued by the Inkomati-Usutu Catchment Management Agency (IUCMA), Reference no: 04/X23F/ABEFGJ/4725. No person is allowed to engage in a water use activity unless permissible under section 22 of the National Water Act (Act 36 of 1998). ESCON Consulting (Pty) Ltd has been appointed to apply for the Mine's WUL to include both existing and proposed water uses, and apply for exemption from certain provisions of the Regulations on the use of water for mining and related activities aimed at the protection of water resources (Government Notice 704):

**PUBLIC PARTICIPATION**: Please register as an Interested and Affected Party (I&AP) to receive information on the Scoping & EIA and WUL Application Process. Registered I&APs will be invited to attend public meetings and review reports compiled in terms of the applications. Furthermore, all comments that registered I&APs submit in terms of the Applications will be included in the relevant reports, and addressed throughout the process.

For more information on the project, contact:

**Cabanga Environmental:** Lelani Claassen Tel: 011 794 7534 / Fax: (011) 794-6946 E-mail: <u>lelani@cabangaenvironmental.co.za</u>

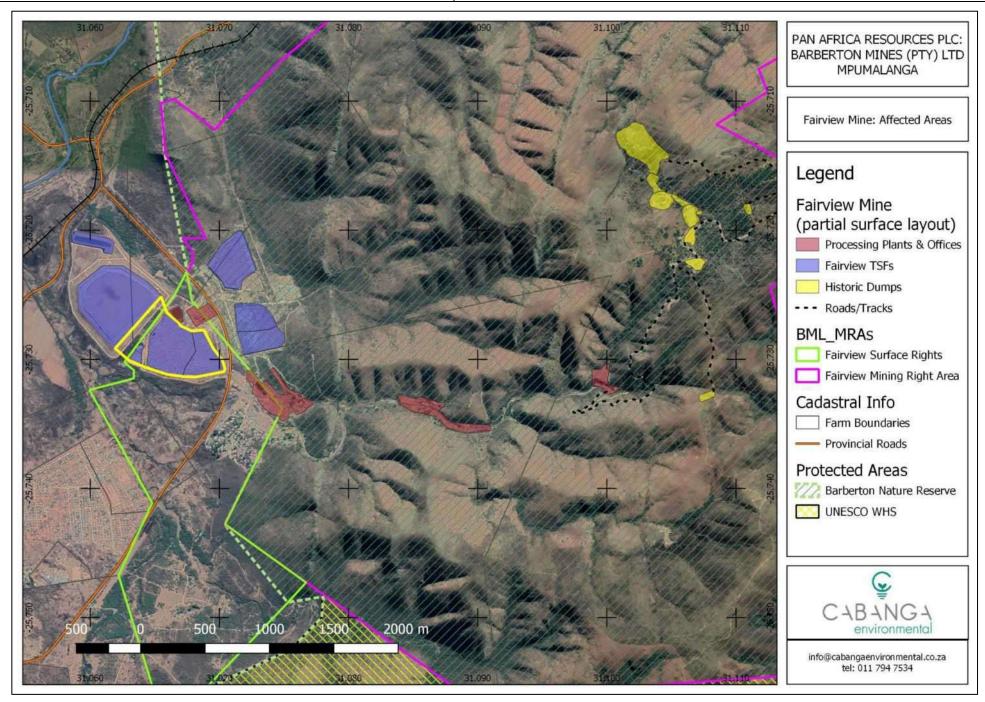
Postnet Suite 470, P/Bag X3, Northriding, 2162

www.cabangaenvironmental.co.za

For more information on the Water Use License, contact:

**ESCON Consulting:** Mr Phumudzo Morris Mavhunga Cell: 072 763 0725 or 081 340 3086

E-mail: morris@escon.org.za



# I-PAN AFRICAN RESOURCES PLC: BARBERTON MINES PTY LTD: SICELO SEMAYINI I-FAIRVIEW SEKUGUNYATWA NGESIMONDZAWO SE-TSF YASE-FAIRVIEW LEPHAKANYISIWE KANYE NEKULUNGISWA KABUSHA KWEMFUCUTA KUMIGODZI YEMLANDVO. INOMBOLO YEREFERENSI YEMAYINI YEGOLIDE I-FAIRVIEW: MP/30/5/1/2/2/191MR

I-Barberton Mines (Pty) Ltd (BML), yenta incenye ye- Pan African Resources PLC, ingumnikati kantsi isebentisa Imayini i-Fairview dvutane nelidolobha i-Barberton, eMpumalanga. Imayini endzaweni yase-Fairview yacala ngeminyaka yabo -1880.

Kusebenta kwemayini kufaka kusebenta ngaphansi emgodzini wemayini yegolide, kanye nekulungiswa kabusha kwematailing emhlabatsini, kanye nekucubungula kwangekhatsi. Ema-Flotation Tailings kanye ne- CIL Tailings akhicitwa yiplanti yekucubungula ye-Fairview. Ema-Tailings kwanyalo afakwe ku - Tailings Storage Facility (TSF) leyatiwa nge Bramber Tailings Dam Lensha, noma i-BTRP TSF.

Le- Bramber lensha/BTRP TSF ayinawo emandla lenele ekuchubeka njalo nekukhicita. Ngako-ke, i-BML iphakamisa kwakha i-TSF lensha endzaweni ye-Bramber TSF leseyalungiswa. I-TSF lensha itawukhonjiswa njenge-Fairview TSF ibuye ihlanganise i-Bramber TSF lensha yanyalo.

Lokunye, kumayina igolide ngekwemlandvo endzaweni kube nemtselela wekulahlwa kwemfucuta lenyenti kuyo yonkhe Indzawo Leneligunya Lekumayina i-Fairview (i-MRA). Leminyenti yalemigodzi isesenemaphesenti lasetulu egolide. I-BML ifisa kutfola emagunya ladzingekile ekutfola umkhicito kulemigodzi yemlandvo ngetindlela temekheniki kanye nekupolisha lomkhicito kuPlanti ye-Fairview Lekhona. Lokucubungula kabusha kunetinhloso letimbili, kk. Kutfolakala kwegolide kulemigodzi nekuhlobisa simondzawo.

Kusebentisa imiklamo lephakanyisiwe, i-BML kudzingeke kutsi ifake sicelo seligunya ngekwemtsetfosimiso lolandzelako wemayini kanye nesimondzawo:

- Kuchitjiyelwa kweLuhlelo Lekulawula Simondzawo (i-EMP) ngekweSigaba 102 seMtsetfo Wekutfutfukisa Tinsita Temafutsa, wanga 2002 (Umtsetfo Namba28 wanga 2002) (i-MPRDA):
- Ligunya Lesimondzawo leMisebenti Lebhalisiwe ngekweMtsetfo Wekulawula Simondzawo Wavelonkhe, wanga 1998 (Umtsetfo Namba 107 wanga 1998) (i-NEMA), kanye Netsetfosimiso WeLuhlolo Lemtselela WeSimondzawo (i-EIA), wanga 2014 (njengoba kuchitjiyelwe;
- Imvumo Yekulawula Imfucuta (i-WML) ngekweMtsetfo Wekulawula Imfucuta Yesimondzawo Yavelonkhe, wanga 2008 (Umtsetfo Namba 59 wanga 2008) (i-NEMWA), kanye Nemitsetfosimiso Lebhalisa Kulawulwa Kwemisebenti Yemfucuta lokune, noma kungahle kube nemtselela lomubi kusimondzawo (njengoba kuchitjiyelwe);
- Kuciffwa kwemaphemithi emitfombo yemagugu (imigodzi yemlandvo lemidzala kuneminyaka lengema- 60) ngekweMtsetfo Yemitfombo Yemagugu Yavelonkhe, wanga 1999 (Umtsetfo Namba 25 wanga 1999) (i-NHRA);
- Emaphemithi emvume yalenye indzawo ePlant Yekuvikela Tilwanyana ngekweMtsetfo Wekulawula Lokuphilako Kusimondzawo Savelonkhe, wanga 2004 (Umtsetfo Namba 10 wanga 2004) (i-NEMBA); ne
- Mvumo Yekusetjentiswa Kwemanti Lehlangene (i-WUL) ngekweMtsetfo Wemanti Wavelonkhe, wanga 1998 (Umtsetfo Namba 36 wanga 1998)(i-NWA), kanye Sicelo Semvumo Yekusebentisa Emanti (i-WULA) kanye Nemitsetfosimiso Yeku-Aphila, wanga 2017.

UMSUNGULI: Barberton Mines (Pty) Ltd: Imayini i-Fairview

**INDZAWO**: I- Fairview TSF iphakanyiswe kube ngumzila we-Bramber TSFletawubukwa kabusha ibuye ihlanganise i-Bramber lensha yanyalo/BTRP TSF, cishe 25°43'44.26"S; 31° 4'2.87"E, ku- Farm Fairview 542 JU kutsi i- BML iphatse emalungelo endzawo. Lemigodzi yemlandvo lebukiwe kulungiswa kabusha isetindzaweni letinyenti ku-Fairview MRA, ku-Farm Sheba 940 JU, cishe emakhilomitha lali-10km nyakatfo-mphumalanga ye Barberton.

INCHUBO YEKUFAKA SICELO: Kunemisebenti lemisha lebhalisiwe lehambisana neMklamo lophakanyisiwe, lekhonjiswe ngekweSatiso Sekubhalisa 1, 2 na 3 weMitsetfotimmiso we-ElA wanga 2014 (njengoba kuchitjiyelwe) kanye neSigaba B Seluhlu Lwemisebenti Yekulawula Inkhukhuma lengahle, noma lekungenteka ibe nebungoti kusimondzawo (njengoba kuchitjiyelwe). Inchubo Yekuhlola Umtselela Wesimondzawo kanye neScopingi (i-EIA) iyahambisana nalesicelo. I-Cabanga Environmental icashwe njengaSolwati Wekuhlola Simondzawo (i-EAP) kugcwalisa ticelo tesimondzawo letifanele kanye Nenchubo Yekungenelela Kwemphakatsi

Imayini i-Fairview inemvume lokhona lephasisiwe Yekusebentisa Emanti (i-WUL) lekhishwe yi-Ejensi Yekulawula Inkomati-Usutu Catchment (i-IUCMA), Inamba Yereferensi: 04/X23F/ABEFGJ/4725. Akekho umuntfu lovunyelwe kungenelela emsebentini wekusetjentiswa kwemanti ngaphandle kwekutsi uvunyelwe ngaphansi kwesigaba 22 seMtsetfo Wemanti Wavelonkhe (Umtsetfo 36 wanga 1998). I-ESCON Consulting (Pty) Ltd ikhetselwe kutsi ifake sicelo se-WUL yemayini kufaka kusetjentiswa kwemanti lokukhona kanye naloko lokuphakanyiswako, kanye nekufaka sicelo sekungafakwa kutincenye letitsite teMitsetfosimmiso ekusetjentisweni kwemanti emayini kanye nemisebenti lehambisanako lehlose ekuvikeleni imitfombo yemanti (Satiso saHulumende 704)):

**KUNGENELELA KWEMPHAKATSI:** Sicela ubhalise njengeLicembu lelinenshisekelo nalelitsintsekile (i-I\$AP) kutfola lwatiso ngenchubo yekuScopa & EIA kanye neNchubo Yekufaka Ticelo yeWUI. Ema-I\$AP labhalisiwe atawumenywa kutsi ahambele imihlangano yemphakatsi kanye nekubuyeketa imibiko lesahlongotwa leyentiwe ngekwekufakwa kweticelo. Lokunye, tonkhe tiphawulo letabhalisa ema-I&AP tatfumela ngekweTicelo titawufakwa kumibiko lefanelekile, tilungiswe kuyo yonkhe lenchubo.

Mayelana nalolunye lwatiso kulomklamo, chumana:

Cabanga Environmental: Lelani Claassen

Luc: 011 794 7534 / Ifeksi: (011) 794-6946 Imeyila: lelani@cabangaenvironmental.co.za

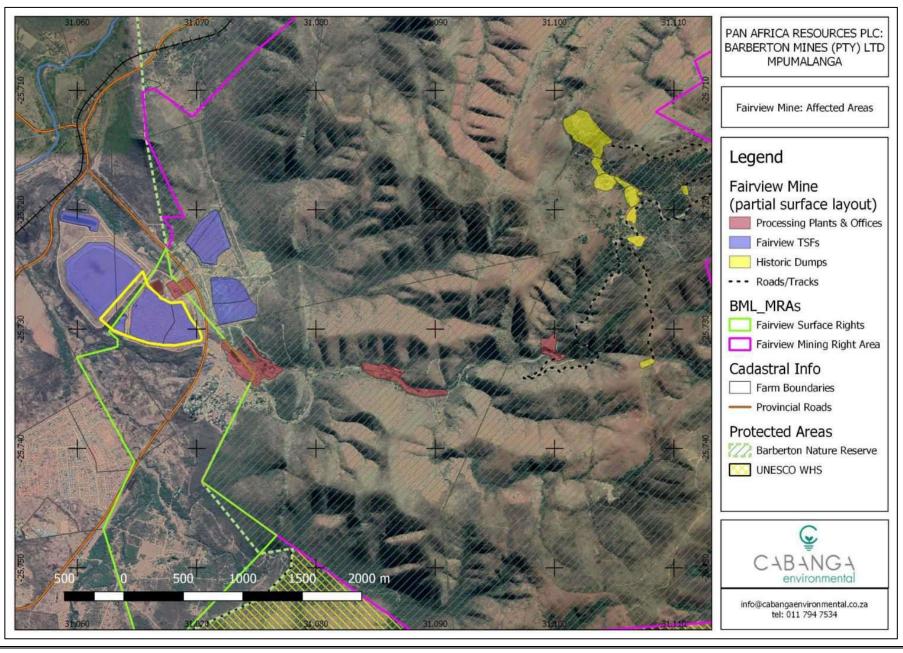
www.cabangaenvironmental.co.za

Postnet Suite 470, P/Bag X3, Northriding, 2162

Mayelana nelwatiso lolunye nge-Water Use License, chumana:

**ESCON Consulting:** Mnu Phumudzo Morris Mavhunga **Makhalekhukhwini:** 072 763 0725 or 081 340 3086

Imeyili: morris@escon.org.za



# ANNEXURE E: MINUTES OF MEETINGS



#### **MINUTES OF MEETING**

**PROJECT NAME:** Pan Africa Resources: Barberton Mines – Fairview TSF and reclamation

of historic dumps

**DATE:** 5 November 2019

**TIME:** 11:00 – 12:00

**LOCATION:** Sinqobile, Barberton, Mpumalanga

#### 1. Attendance

| Name / organization   | Phone                                     | E-Mail                                |
|---|---|---------------------------------------|
| Lelani Claassen / Cabanga<br>Environmental                    | 076 735 3992                              | lelani@cabangaenviron<br>mental.co.za |
| Shelton Tsanga / Cabanga                                      | 011 794 7534                              | shelton@cabangaenviro                 |
| Environmental   |   | nmental.co.za                         |
| Norman Hartman / Barberton Mines                              | 072 658 9987                              | normanh@bmines.co.za                  |
| E.S. Chibi Simelane / Verulam Daycare centre                  | 0721003917                                | elizosinelan02@gmail.co<br>m          |
| Emmanuel Chiridzlu / Verulam Daycare<br>Centre                | 0725399115                                |                                       |
| Sibongile Hlophe / Vegetable Garden                           | 0724052909/0724032<br>909                 |                                       |
| Hlabande Zandile / Vegetable Garden                           | 0818473679                                |                                       |
| Thulisile Phin / Vegetable Garden                             | 0769107916                                |                                       |
| Cebisile Ndwandwe / CDW Coqta                                 | 0764930151                                | fcebisile@gmail.com                   |
| Innocnt Godi / Vegetable Garden                               | 0721560219                                |                                       |
| Muzi Nkosi / Knowledge of Success<br>Singobile youth centre   | 0660861772                                | knowledgeofsuccess@o<br>utlook.com    |
| Malibongwe Cele / Knowledge of Success Singobile youth centre | 0725371374                                | MalibongweCele06@gm<br>ail.com        |
| Aluna Phiri / Vegetable Garden                                | 079710271                                 |                                       |
| Mercy Nqomane / Vegetable garden                              | 0792695203                                |                                       |
| Aventina Bhila / Vegetable Garden                             | 0793231270                                |                                       |
| S Mntungwa / Verulam H.B.C                                    | 0765423424                                |                                       |
| H Maseko / Qinani Bogogo                                      | 0764970944                                |                                       |
| Phindile Mandlazi / Fairview (SGB)                            | 0767539122                                |                                       |
| Jabu Chauque / LLO Sewue                                      | 0767988812                                | jabusimanga@gmail.co<br>m             |
| Issie Khoza / D Secretary Ward<br>Committee                   | 0714380347<br>Park, Bosbok Road, Randpark |                                       |



| Name / organization            | Phone        | E-Mail                 |
|--------------------------------|--------------|------------------------|
| Bonsani Mhlongo / Cogta        | 0764930340   | scelobongs@gmail.com   |
| Mokone Pillsa (DARDLEA)        | 0825757522   | pilusalim@gmail.com    |
| Liberty Shongile / City of MBM | 0665839305 / | libertyhendry@gmail.co |
| municipality                   | 0825109430   | m                      |

#### 2. Key Notes

- All attendees introduced themselves.
- Representatives from Cabanga and Barberton Mines explained the proposed projects to the meeting, with assistance in translating to SiSwati from the Chairperson.
  - The project involves two aspects: 1) the construction of the new Tailings Storage Facility (TSF) at the footprint of the reclaimed Bramber TSF, and 2) recovery of material left in the mountains by historical mining activities. Photographs and Maps were distributed to the meeting attendees.
- Representatives from Cabanga (with translation assistance from the Chairperson) summarized the process to be followed in applying for Environmental Authorization, including the public participation process (PPP).
- The meeting was opened for questions and discussion.

#### 3. Questions and answers

- It was stated that a company named Mabaclocks claim to own the historic dumps in the mountains and that they are reclaiming and processing similar material just outside of the border of the nature reserve. The legal status of these operations isn't clear.
  - o Cabanga committed to look into the matter by consulting the SAMRAD system to verify if such a license is in place.
  - It was explained that ownership of such historic dumps usually belongs to the owner / person responsible for the surface rights, under common-law obligations, which in this case would be the nature reserve, or the Mine, as the case may be.
- The question was raised: how many people will benefit from this project.
  - o It was explained that the project is not aimed at the creation of new job opportunities, but that the Mine needs additional TSF capacity, to keep operating the plant and the Mine. Thus, the retention of the approximately 2000 existing jobs at Fairview Mine will be at risk if the project is not implemented.
  - o Some opportunities may be associated with the project and more detail should be provided in the scoping phase and EIA phase reports and meetings.
- A community member asked whether the project will encroach on the community garden and other surrounding cultivated areas, and asked about the timing of construction of the new TSF.
  - o It was confirmed that the community garden and other surrounding areas will not be directly affected as the new TSF is proposed on the footprint of the previous Bramber TSF, and adjoining the existing BTRP TSF (New Bramber Tailings Dam). The new TSF may not be built until all the necessary authorizations are in place. The EIA process normally takes about 12 months but there is pressure from the Mine Management to complete this EIA process as soon as possible.
- The level of involvement of Provincial Government Departments in the EIA Process was questioned.
  - o It was explained that the Department of Mineral Resources is the competent authority in terms of this application, and that Provincial Departments of agriculture and environmental affairs as well as other State Owned Entities





(SOE's) and various organizations are informed of the Project, as part of the PPP, and invited to attend meetings and provide comments.

- A community member asked whether the ongoing reclamation activities and the new TSF will affect air quality and/or water resources negatively within the community.
  - o The impacts of reclamation would have been assessed as part of the BTRP applications. Those impacts should be considered in the reports, as they would be cumulative to any new impacts associated with this proposed project. It was also confirmed that an air quality impact assessment, hydrology impact assessment (surface water) and hydrogeology impact assessment (groundwater) has been commissioned as part of the EIA Process.
- A community member wanted to know if Cabanga Environmental will contribute to the community projects such as the community centre, as part of their corporate social responsibility.
  - Cabanga and Barberton Mines explained that all contractors to Barberton Mines, including Cabanga in this case, commits to making a contribution, calculated as a percentage of the contract value, to the Barberton Mines Transformation Trust (BMTT), from where the Mine is able to make more meaningful contributions to community projects in a coordinated manner.
- One of the community members thanked Cabanga and the Mine for involving the community in the EIA process.
- A request was made to include the reference number for the application on the Plans. It was confirmed that the correct reference number is displayed on the Background Information Document (BID) which was distributed in English and SiSwati to all attendees, and that future plans will also carry the reference number.

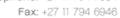
Cabanga was thanked for their attendance. Cabanga thanked the chairperson and community for accommodating the discussion in their meeting Agenda.



# ANNEXURE VII:

# **CORRESPONDENCE WITH AUTHORITIES AND I&APS**







E-mail: info@cabangaenvironmental.co.za

Department of Rural Development and Land Reform

Land Claims / Land Restitution Support

E-mail: sam.nkosi@drdlr.gov.za

2 October 2019

#### BARBERTON MINES (PTY) LTD: FAIRVIEW PROJECT, BARBETON, MPUMALANGA

Dear Sir/Ma'am;

Barberton Mines (Pty) Ltd intends to submit an application for Environmental Authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) and its associated Environmental Impact Assessment (EIA) Regulations, 2014 (as amended) for proposed surface activities and infrastructure for the Fairview Project.

Please can you indicate if any of the below mentioned properties are under any current land claims and provide us with the necessary clearance letter?

| Farm Name       |
|-----------------|
| Sheba 940 JU    |
| Fairview 542 JU |

We trust that you find the above in order and look forward to hearing from you.

Kind Regards,

Michelle Venter

Cabanga Concepts CC • Reg No; CX2006/024543/23 • VAT No; 4740226628



OFFICE OF THE REGIONAL LAND CLAIMS COMMISSIONER: MPUMALANGA

18 Bell Street, Bell Tower building, Restitution House, Nelspruit | Private Bag X11330, Nelspruit, 1200

Tel: (013) 752 4054 | Fax: (013) 752 5410

**ENQUIRIES: MS T DHLAMINI** 

#### CABANGA ENVIRONMENTAL

**ATTENTION: MICHELLE VENTER** 

RE: YOUR ENQUIRY: LAND RESTITUTION CLAIMS AGAINST THE FOLLOWING PROPERTY IN TERMS OF THE RESTITUTION OF LAND RIGHTS ACT NO.22 OF 1994

#### DETAILS OF PROPERTY DESCRIPTION

| Property Description   | Comments  |
|--|---|
| Province of Mpumalanga<br>Magisterial District:<br>Property: | According to our Database, there is currently no registered land claim which was lodged against the mentioned property. |
| • FARM SHEBA 940 JU  |   |

- 1. The above-mentioned matter and your enquiry received on 02 October 2019, refers.
- TAKE NOTICE that land claims are lodged with the office of the Commission in accordance with the historical and or present property descriptions of the dispossessed properties and therefore may not match the current property description as described in your correspondence in respect of the above-mentioned properties.
- 3. However, if the historical description of any of the above property has changed since 1913, or you are aware of any other local or official name by which it was then described or currently known, kindly supply us with such information to enable us to search further.

4. TAKE NOTICE FURTHER THAT while the Regional Land Claims Commission: Mpumalanga has taken reasonable care to ensure the accuracy of the above-mentioned information, the Commission cannot be held accountable if, through the process of further ongoing investigation, additional information may be found that contradicts paragraph 2 above.

Yours Faithfully

Mr. E.S. NKOSI CHIEF DIRECTOR

OFFICE OF REGINAL LAND CLAIMS COMMISSION

DATE: 11 10 2019



OFFICE OF THE REGIONAL LAND CLAIMS COMMISSIONER: MPUMALANGA

18 Bell Street, Bell Tower building, Restitution House, Nelspruit | Private Bag X11330, Nelspruit, 1200

Tel: (013) 752 4054 | Fax: (013) 752 5410

**ENQUIRIES: MS T DHLAMINI** 

#### CABANGA ENVIRONMENTAL

ATTENTION: MICHELLE VENTER

LAND CLAIM IN TERMS OF THE RESTITUTION OF LAND RIGHTS ACT, 1994 AND AS AMENDED IN TERMS OF THE RESTITUTION OF THE LAND RIGHTS AMENDMENT ACT 2014 (ACT NO 15 OF 2014).

#### PROPERTY DESCRIPTION:

FARM FAIRVIEW 542 JU

REFERENCE NUMBERS: R/6/141/287/49985

We refer to the above-mentioned matter and your enquiry received on the 02 October 2019

Note that the lodgement of land claim is based on the Restitution of Land Rights Act, Act no 22 of 1994 and the Restitution of Land Rights Amendment Act, (Act not 15 of 2014.

Please note that there is no registered land claim lodged before 1998 period. However, there is new claim as mentioned above lodged in 2014. The Commission is empowered to investigate all land claims and where applicable issues a Government Gazette to interested and affected parties if such land claims has been approved as valid claims.

The above claim was lodged in terms of the Restitution of Land Rights Amendment Act, 2014 (Act No 15 of 2014) ("the Amendment Act") which, amongst others, reopened the lodgement of claims for a period of five years.

The validity of the Amendment Act was challenged in the Constitutional Court. The Constitutional Court found the Amendment Act to be invalid because of the failure of Parliament to facilitate public involvement as required by the Constitution. The Amendment Act ceased to be law on 28 July 2016 and the Commission is no longer allowed to accept lodgement of new claims from that date.

The Constitutional Court ordered that the claims that were lodged between 1 July 2014 and 27 July 2016 are validly lodged, but it interdicted the Commission from processing those claims until the Commission has finalised the claims lodged by 31 December 1998 or until Parliament passes a new law providing for the re-opening of lodgement of land claims. Parliament was given until 27 July 2018 to pass such a law.

The Commission will therefore not be processing these new claims until it finishes claims lodged by 31 December 1998 or until Parliament passes a new law providing for re-opening of lodgement of claims.

We apologise for the inconvenience caused.

Please quote the claim reference number in all correspondence with the Commission.

Yours sincerely,

Mr. E.S. NKOSI

CHIEF DIRECTOR
OFFICE OF REGINAL LAND CLAIMS COMMISSION

DATE: 11/10/2019

CABANGA Email: et accompany

ATTENDANCE REGISTER

MEETING: PRE-Application Constultation - Fairview DATE: 17 October 2019

VENUE: DMR Mpumalanga-Emalahlen;

TIME: 10hoo

| NAME & SURNAME     | COMPANY/INTEREST | CELL NO      | E-MAIL ADDRESS                                    | SIGNATURE         |
|--------------------|------------------|--------------|---|-------------------|
| Mashudu            | DMIZ             | 019 872 0062 | 079 872 0062 mashed madde                         | Sold              |
| Subcari<br>Nobea v | DMR              | 08273562(0   | Fudranimabago                                     |                   |
| M. Nollozi         | PAYBMC           | 071 403 9219 | 071 403 9219 mendiand @ pat. 600                  | B                 |
| Kensan Rosmen      | Colomba          | 4522206280   | Kene Cabangendian mendal, Co-24                   | renoveulal, co-24 |
| LELANI CLAASSEN    | Colounga         | 0767353992   | 0767353992 Telani @ cabanga environmental. co. 20 | angental 10,20    |
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# lelani@cabangaconcepts.co.za

| From:  | lelani@cabangaconcepts.co.za <lelani@cabangaenvironmental.co.za></lelani@cabangaenvironmental.co.za>   |  |  |   |  |
|--|--|--|--|---|--|
| Sent:  | Tuesday, 29 October 2019 15:31   |  |  |   |  |
| То:  | 'Johan Eksteen'; 'Francois du Toit'; 'Frans Krige'; 'khumbelomalela@gmail.com'   |  |  |   |  |
| Cc:  | 'Mandla Ndlozi'; 'normanh@bmines.co.za'; 'norman@concessioncreek.co.za'; 'Simon  |  |  |   |  |
|  | Shoba'   |  |  |   |  |
| Subject:   | RE: Meeting Request: Environmental Impact Assessment Process at Fairview Mine  |  |  |   |  |
| Good day Johan,  |  |  |  |   |  |
| Thank you very much for the feedback on my request.  We will therefore go ahead with other initial consultations, including the distribution of the Background Information Documents to you and all the other registered Interested and Affected Parties. Once the Draft Scoping Report becomes available, you will also be informed of that and invited to comment.  We will have two public meetings as part of the public participation process, one in the scoping phase and again in the EIA phase. We will also be happy to meet with you separately if you wish. Please keep in touch and let us know what would be a suitable form of engagement for you.              |  |  |  |   |  |
|  |  |  |  | Kindest Regards,  |  |
|  |  |  |  | Lelani Claassen  Environmental Assessment Practitioner  Registration Number 2018/153  t: +27 11 794 7534   c: +27 76 735 3992  e: lelani@cabangaenvironmental.co.za  Unit 5 & 6 Beyers Office Park, Bosbok Road, Randpark Ridge  www.cabangaenvironmental.co.za |  |
| Sent: Tuesday, 29<br>To: Francois du To<br><lelani@cabanga<br>Cc: 'Mandla Ndlo:<br/><bshoba3@gmail< th=""><th>een <johan.eksteen@mtpa.co.za><br/>October 2019 09:56<br/>Dit <francois.dutoit@mtpa.co.za>; lelani@cabangaconcepts.co.za<br/>environmental.co.za&gt;; Frans Krige <franskrige@telkomsa.net>; khumbelomalela@gmail.com<br/>zi' <mandlan@bmines.co.za>; normanh@bmines.co.za; norman@concessioncreek.co.za; Simon Shoba<br/>.com&gt;<br/>ting Request: Environmental Impact Assessment Process at Fairview Mine</mandlan@bmines.co.za></franskrige@telkomsa.net></francois.dutoit@mtpa.co.za></johan.eksteen@mtpa.co.za></th></bshoba3@gmail<></lelani@cabanga<br> | een <johan.eksteen@mtpa.co.za><br/>October 2019 09:56<br/>Dit <francois.dutoit@mtpa.co.za>; lelani@cabangaconcepts.co.za<br/>environmental.co.za&gt;; Frans Krige <franskrige@telkomsa.net>; khumbelomalela@gmail.com<br/>zi' <mandlan@bmines.co.za>; normanh@bmines.co.za; norman@concessioncreek.co.za; Simon Shoba<br/>.com&gt;<br/>ting Request: Environmental Impact Assessment Process at Fairview Mine</mandlan@bmines.co.za></franskrige@telkomsa.net></francois.dutoit@mtpa.co.za></johan.eksteen@mtpa.co.za> |  |  |   |  |

Your e-mail proposing a meeting to discuss the Fairview mine projects and proposed approach refer.

Currently availability of the relevant members of the MTPA is problematic due to busy programs, essential surveys and planned leave.

The MTPA deals with many EIA related role-players, and would like to avoid handling projects on a piecemeal basis. The MTPA would prefer to discuss projects with complete sets of documentation.

We are not unwilling to meet, but formal meetings to discuss circulated/submitted documents is preferred.

Regards Johan



Johan Eksteen

Manager Scientific Services

Mpumalanga Tourism & Parks Agency

Tel: +27 13 759 5513

johan.eksteen@mtpa.co.za | www.mpumalanga.com N4 National Road, Hall's Gateway, Mataffin, Mbombela, South Africa Private Bag X11338, Nelspruit (Mbombela), 1200

#### Disclaimer:

All views or opinions expressed in this electronic message and its attachments are the views of the sender and do not necessarily reflect the views and opinions of the Mpumalanga Tourism and Parks Agency. No employee of Mpumalanga Tourism and Parks Agency is entitled to conclude a binding contract on behalf of the Mpumalanga Tourism and Parks Agency unless he/ she is an Accounting Officer of the Mpumalanga Tourism and Parks Agency, or his or her authorized representative. The information contained in this message and its attachments may be confidential or privileged and is for the use of the named recipient only, except where the sender specifically states otherwise. If you are not the intended recipient you may not copy or deliver this message to anyone.

From: Francois du Toit <Francois.duToit@mtpa.co.za>

Sent: Monday, October 28, 2019 1:48 PM

To: lelani@cabangaconcepts.co.za <lelani@cabangaenvironmental.co.za>; Johan Eksteen <Johan.Eksteen@mtpa.co.za>;

Frans Krige <franskrige@telkomsa.net>; khumbelomalela@gmail.com

Cc: 'Mandla Ndlozi' < mandlan@bmines.co.za >; normanh@bmines.co.za; norman@concessioncreek.co.za

Subject: RE: Meeting Request: Environmental Impact Assessment Process at Fairview Mine

Afternoon Lelani

I will be in contact with you during the week to finalize a date.

Regards



Francois du Toit Reserve Manager: BNR

Mpumalanga Tourism and Parks Agency

Tel: (+27) 13 712 7920 Mobile: (+27) 83 628 1823 Fax: (+27) 13 712 7931 E-mail: francois@mtpa.co.za

Postal: P/Bag X11338, Nelspruit, 1200 Website: www.mpumalanga.com

From: lelani@cabangaconcepts.co.za [mailto:lelani@cabangaenvironmental.co.za]

**Sent:** Monday, October 28, 2019 11:47 AM

To: Francois du Toit <Francois.duToit@mtpa.co.za>; Johan Eksteen <Johan.Eksteen@mtpa.co.za>;

mervyn.lotter@gmail.com; Louis Loock <Louis.Loock@mtpa.co.za>

Cc: 'Mandla Ndlozi' <mandlan@bmines.co.za>; normanh@bmines.co.za; norman@concessioncreek.co.za

Subject: RE: Meeting Request: Environmental Impact Assessment Process at Fairview Mine

#### Good day Francois,

My e-mail requests below refer. I have not had any feedback from you in this regard. Please advise if the MTPA is willing to meet with us to discuss the planned projects at Fairview Mine, during next week, seeing as we're already in the week originally proposed?

Thank you and Kind Regards,

#### Lelani Claassen

#### **Environmental Assessment Practitioner**

Registration Number 2018/153

t: <u>+27 11 794 7534</u> | **c:** +27 76 735 3992 **e:** <u>lelani@cabangaenvironmental.co.za</u>

Unit 5 & 6 Beyers Office Park, Bosbok Road, Randpark Ridge

www.cabangaenvironmental.co.za

From: lelani@cabangaconcepts.co.za <lelani@cabangaenvironmental.co.za>

Sent: Friday, 18 October 2019 08:39

To: 'Francois du Toit' < <a href="mailto:Francois.duToit@mtpa.co.za">Francois.duToit@mtpa.co.za</a>; 'Johan Eksteen' < <a href="mailto:Johan.Eksteen@mtpa.co.za">Johan.Eksteen@mtpa.co.za</a>; 'mervyn.lotter@gmail.com' < <a href="mailto:mervyn.lotter@gmail.com">mervyn.lotter@gmail.com</a>; 'Louis Loock' < <a href="mailto:Loock@mtpa.co.za">Louis.Loock@mtpa.co.za</a>>; 'Cc: 'Mandla Ndlozi' < <a href="mailto:mandlan@bmines.co.za">mandlan@bmines.co.za</a>; 'normanh@bmines.co.za</a>; 
'norman@concessioncreek.co.za' < norman@concessioncreek.co.za >

Subject: RE: Meeting Request: Environmental Impact Assessment Process at Fairview Mine

#### Good morning All,

My e-mail below requesting a meeting with the MTPA has reference.

Kindly indicate your availability to meet with us during the week of 28 October to 01 November 2019? Thank you and Kind Regards,

#### Lelani Claassen

# Environmental Assessment Practitioner Registration Number 2018/153

t: <u>+27 11 794 7534</u> | c: +27 76 735 3992 e: <u>lelani@cabangaenvironmental.co.za</u>

Unit 5 & 6 Beyers Office Park, Bosbok Road, Randpark Ridge

www.cabangaenvironmental.co.za

From: lelani@cabangaconcepts.co.za <lelani@cabangaenvironmental.co.za>

Sent: Tuesday, 15 October 2019 10:53

To: 'Francois du Toit' < <a href="mailto:Francois.duToit@mtpa.co.za">Francois.duToit@mtpa.co.za</a>; 'Johan Eksteen' < <a href="mailto:Johan.Eksteen@mtpa.co.za">Johan.Eksteen@mtpa.co.za</a>; 'mervyn.lotter@gmail.com</a>; 'Louis Loock' < <a href="mailto:Loock@mtpa.co.za">Louis.Loock@mtpa.co.za</a>>; 'Mandla Ndlozi' < <a href="mailto:mandlan@bmines.co.za">mandlan@bmines.co.za</a>; 'normanh@bmines.co.za</a>; 'normanh@bmines.co.za</a>;

'norman@concessioncreek.co.za' < norman@concessioncreek.co.za>

Subject: Meeting Request: Environmental Impact Assessment Process at Fairview Mine

Good day All,

Cabanga Environmental has been appointed as the independent Environmental Assessment Practitioner (EAP) to facilitate the Environmental Impact Assessment (EIA) and associated Public Participation Process (PPP) for proposed activities at Fairview Mine.

The proposed project involves the establishment of a new Tailings Storage Facility (TSF) at the footprint of the old Bramber TSF which has been reclaimed as part of the BTRP, and the reclamation of material from historic dumps within the Fairview Mining Right Area (MRA). The TSF component of this project is immediately adjacent to the Barberton Nature Reserve and the reclamation component will affect the Nature Reserve directly, as the boundaries of the Nature Reserve and the MRA overlap.

As such, you have been identified as a key stakeholder and interested and affected party (I&AP) in this project. We would very much like to meet with you, to discuss the projects and proposed approach. Are you available during the week of 28 October to 01 November 2019 to meet with us? We will be in the Barberton area during that week and would very much appreciate your time.

Thank you in advance, and Kind Regards,



#### Lelani Claassen

#### Registered Environmental Assessment Practitioner 2018/153

**t**: <u>+27 11 794 7534</u> | **c**: +27 76 735 3992

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