Assmang (Pty) Ltd: Beeshoek Iron Ore Mine

<u>Integrated Environmental Authorisation Application</u> in terms of National Environmental Management Act, 1998 and the National Environmental Management: Waste Act, 2008 for:

Beeshoek Mine Optimisation Project

Report Purpose
FINAL

Report Status
<u>For DMRE Submission</u>

Report Reference
EnviroGistics Ref.: 21910
Departmental Ref.: 223MRC
Mining Right Ref: 223MRC

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EAPASA Reg No: 2019/306; SACNASP Reg No: 400198/09

Report Reviewer
Michelle Pretorius
SACNASP Reg No: 400003/15

9 February 2021

Author

Tanja Bekker is registered as a Professional Natural Scientist in the field of Environmental Science with the South African Council for Natural Scientific Professions (SACNASP) and is also a registered Environmental Assessment Practitioner (EAP) with the Environmental Assessment Practitioners Association of South Africa (EAPASA), a legal requirement stipulated by the National Environmental Management Act, 1998. She is further certified as an ISO 14001 Lead Auditor. Her qualifications include BSc. Earth Sciences (Geology and Geography), BSc. (Hons.) Geography and MSc. Environmental Management. In addition to her tertiary qualifications, she obtained a Certificate in Project Management, and completed the Management Advancement Programme at Wits Business School.

With more than 18 years' experience in environmental management and the consulting industry, she follows a methodical and practical approach in attending to environmental problems and identifying environmental solutions throughout the planning, initiation, operation and decommissioning or closure of projects.

Disclaimer

The findings, results, observations, conclusions and recommendations given in this report are based on the author's best scientific and professional knowledge, as well as available information. Information utilised and contained in this report is based on data/information supplied to EnviroGistics (Pty) Ltd by the client and other external sources (including previous site investigation data and external specialist studies). EnviroGistics (Pty) Ltd exercises due care and diligence in rendering services and preparing documents, however it has been assumed that the information provided to EnviroGistics (Pty) Ltd is correct and as such the accuracy of the conclusions made are reliant on the accuracy and completeness of the data supplied. No responsibility is accepted by EnviroGistics (Pty) Ltd for incomplete or inaccurate data supplied by the client and/or other external sources. Opinions expressed in this report apply to the site conditions and features that existed at the time of the start of the relevant investigations and the production of this document. For this reason, EnviroGistics (Pty) Ltd accepts no liability, and the client by receiving and therefore accepting this document, indemnifies EnviroGistics (Pty) Ltd and its directors against all actions, claims, demands, losses, liabilities, costs, damages and expenses arising from or in connection with the services rendered, directly or indirectly.

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Quality Control

Report Title	BEESHOEK IRON ORE MINE: INTEGRATED EA APPLICATION FOR THE BEESHOEK MINE OPTIMISATION PROJECT	
Report Ref. No.	21910F	
Report Status	Final	
Report Purpose	For DMRE Submission	
	Signature	**Date**
Author	Tanja Bekker	25 November 2020
Reviewer	Michelle Pretorius	14 December 2020

Amendments

Report Ref:	Nature of Amendment	Date	Report Output Ref:
21910W	External Review, minor grammatic and clarification amendments	15 December 2020	121910_D1
121910_D1	Inclusion of comments and project description clarifications issued by Licence Holder.	30 December 2020	21901_D2
21901_D2	Inclusion of updated description of the Beneficiation Optimisation Project	20 January 2021	21901_D2
21901_D2	Inclusion of updated description of the Beneficiation Optimisation Project – sewage conservancy tanks and stockpile capacities.	3 February 2021	21901_D3
21901_D3	Inclusion of updated description of the Beneficiation Optimisation Project stockpile capacities and descriptions	5 February 2021	21901_F

Distribution

Distributed To:	Purpose:	Date	Format/Amount
Michelle Pretorius	External Review	10 December 2020	Electronic
Tanja Bekker	Inclusion of external review	14 December 2020	Electronic
Msimelelo Silomntu; Chrystal Vries	Licence Holder Review	15 December 2020	Electronic
Tanja Bekker	Inclusion of Licence Holder recommendations	29 December 2020	Electronic
Msimelelo Silomntu; Chrystal Vries; Maryke Burger; Leonie Horn, Kobus Harding, Arno Neveling	Licence Holder Review	30 December 2020	Electronic
Tanja Bekker	Inclusion of Licence Holder recommendations	30 December 2020	Electronic
Tanja Bekker	Inclusion of Licence Holder further recommendations	19 January 2021	Electronic
Msimelelo Silomntu; Chrystal Vries; Maryke Burger; Leonie Horn, Kobus Harding, Arno Neveling	Licence Holder Final Acceptance	20 January 2021	Electronic
Lana van der Westhuizen	Final legal review	21 January 2021	
Tanja Bekker	Inclusion of Licence Holder further recommendations	3 February 2021	Electronic
Msimelelo Silomntu; Chrystal Vries; Maryke Burger; Leonie Horn, Kobus Harding, Arno Neveling	Licence Holder Final Acceptance	3 February 2021	Electronic
Tanja Bekker	Inclusion of Licence Holder further recommendations	4 February 2021	Electronic
Msimelelo Silomntu; Chrystal Vries; Maryke Burger; Leonie Horn, Kobus Harding, Arno Neveling	Licence Holder Final Acceptance	9 February 2021	Electronic
Submission to DMRE	Commencement of Project Timeframes and agreement on process recommended	10 February 2021	Electronic Copy and Two (2) hard copies

Executive Summary

Introduction

Beeshoek is situated in the Tsantsabane Local Municipality, with neighbouring towns being Postmasburg, located 7km east of the mine and Kathu located 70km north of the mine.

Mining at Beeshoek was established in 1964 with a basic hand sorting operation. In 1975 a full Washing and Screening Plant was installed. Because of increased production, Beeshoek South, a southern extension of the Beeshoek Mine, was commissioned during 1999 on the farms Beesthoek and Olynfontein.

Assmang (Pty) Ltd is the holder of the new order rights in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) (MPRDA) in respect of high-grade hematite iron ore deposits at Beeshoek on the farms Beesthoek and Olynfontein. The mining method currently entails an opencast mining operation, which consists of five (5) active opencast pits (Village Opencast Pit, HF Opencast Pit, BF Opencast Pit, East Opencast Pit, and BN Opencast Pit). Although other opencast pits are dormant at this time, these are continuously assessed in terms of their economic value. The current resources of the Mine are approximately 97.17 million tonnes with a reserve of about 26.18 million tonnes. Beeshoek can be broadly categorised as follows:

- Northern mining area (North Mine): This area comprises active as well as historical mining areas. A number of small quarries and mine residue dumps of various categories are located within this area. The area also includes the existing iron ore beneficiation plant, tailings storage facility (slimes dam), as well as the North Opencast Pits;
- Main Offices, village (since demolished) and recreational area; and
- Southern mining area (South Mine): This area comprises large opencast pits and associated Waste Rock Dumps (WRDs). The Village Opencast Pit and associated WRD are the main activities in this area. This area also includes a crushing and screening area as pre-preparation of the Run of Mine (ROM) iron ore before being routed by overland conveyor to the Iron Ore Beneficiation Plant located at North Mine.

Project Description

Regulation 23 of the MPRDA states in Section 1(a), that subject to subsection 4, the Minister must grant a mining right if the mineral can be mined optimally in accordance with the mining work programme. The mine has been awarded a Mining Right by the Department of Mineral Resources (DMR; now Department of Mineral Resources and Energy (DMRE)) and therefore has an obligation to give effect to the following:

- The ongoing development and improvement of the Mining Work Programme which details the planned mining activities to be followed in order to mine the mineral resource optimally; and
- Optimal mining of minerals must be undertaken, as the Minerals and Petroleum Board may recommend to the Minister to direct the holder of a mining right to take corrective measures if the Board establishes that the minerals are not being mined optimally in accordance with the Mining Work Programme. The Minister may, on the recommendation of the Board, suspend or cancel a mining right if the Minister is convinced that any act or omission by the holder justifies the suspension or cancellation of the right.

Beeshoek Mine has actively investigating opportunities for the continued and sustainable mining of iron ore reserves within the approved Mining Rights Area. This application for Environmental Authorisation specifically gives effect to that and includes the following projects:

1. Amendments to certain conditions which have been identified in the recent EMPr Environmental Audits, 2019 as “not sufficient or not practical” to address activities on site (please refer to Annexure 8 for the External Audit Memorandum submitted to the DMRE during November 2019). The specific conditions which were identified for exclusion or amendment are as follows (specifications on the amendments will be addressed in the EIA reports and based on the outcomes of the current specialist reports):
    - *An Environmental Audit Report as contemplated in regulation 55(1)(c) must be submitted bi-annually (from the date on which the permit was granted) to the Regional Manager: Mineral Regulations.*
    - *All vehicles will have mufflers to minimise noise emissions.*
    - *Vegetation of the soil stockpiles with suitable grass species in order to limit erosion of the outer slopes of the stockpiles.*
    - *Stockpile heights will be restricted to 1.5m.*
    - *Dust extraction systems comprising of wet scrubbers will be installed at the secondary and tertiary crushing and screening plants. For crushing and screening operations at metallic mineral processing*

plants, fugitive dust can be controlled with wet scrubbers or baghouses. Chemical dust suppression systems will be implemented at the primary crushing and screening plants.

- *Any storm water runoff from the outer slopes will contain some eroded residue solids. In order to prevent this from discharging into the surrounding environment, the side slopes of the WRDs will be dosed down to 1v:3h then covered with approximately 150mm topsoil and then grasses.*
- *Re-vegetated areas will be maintained by means of regular watering, weed controls and cattle-grazing exclusion until the vegetation has settled to ensure that it is stable, and that erosion does not occur.*
- *Surface water quality will be monitored to ensure that stipulated limits are not contravened.*
- *After the topsoil has been replaced the area should be ameliorated and seeded, should self-succession of vegetation not take place.*
- *The footprint (product and fines stockpiles) areas will be topsoiled and ripped.*
- *The following measures will be implemented:*
  - *The areas will be landscaped to be free draining;*
  - *The topsoil and subsoils with the appropriate seedbed as stripped during the construction and operational phases will be placed over these areas to a depth as specified by a qualified specialist. The topsoil shall be appropriately ameliorated to allow vegetation to grow rapidly if required – it should be noted that the mine will*
  - *encourage self-succession of vegetation, if this does not take place effectively a revegetation project will be implemented;*
  - *If a reasonable assessment indicates that the re-establishment of vegetation is unacceptable slow, the soil needs to be analysed and any deleterious effects must be corrected, and the area be seeded with a seed mix to specification;*
  - *Appropriate erosion control measures (i.e. contour banks) must be taken where required;*
  - *All rehabilitated areas will be fenced off up until the area is regarded as stable; and*
  - *All illegal invader plants and weeds shall be dealt with as required in terms of the relevant legislation.*

2. Specific Demarcation of Run of Mine (ROM) Stockpiles on South Mine;
3. Amendments to the design of existing WRDs in terms of the increase in heights, and allowance for final slope, which will result in extension of footprints;
4. Increase of Opencast Pit footprint areas, as well as the undertaking of detrital mining;
5. Beneficiation Plant Optimisation:
   - Development of a Jig Plant (this area will be located in the vicinity of the current plant) for the beneficiation of discard and low-grade Iron Ore;
   - Development of a WHIMS Plant for the beneficiation of slimes;
   - Development of a new surface water dam for the purposes of the Beneficiation Optimisation Projects (new Jig and WHIMS Plants); and
6. Development of supporting infrastructure such as power lines, roads, pipelines and improvements to storm water management systems where applicable.

The purpose of this project is to give effect to the Regulation 23 MPRDA requirements for the optimisation of a Mining Right, as well as the implementation of the best practical environmental management measures for the operation and management of the Waste Rock Dumps. Further to this, the proposed Beeshoek Low-Grade Beneficiation Optimisation Project is to allow Beeshoek Iron Ore to optimise the mining process and reduce mineral waste on site (in line with the National Waste Management Hierarchy), by implementing two additional Beneficiation Projects, namely a new WHIMS Plant to rework the existing slimes from the Slimes Dam and a new Jig Plant to rework the existing low-grade stockpile (Discard Dump). This project will have numerous economic and environmental benefits.

Applicable Legal Applications

In terms of the NEMA, there are three (3) listing notices which should be considered for this application. These listing notices were amended during April 2017. This amendment did not repeal the 2014 listed activities, but purely amended certain listings. Listing Notice 1 (Regulation 983) activities require a Basic Assessment Process, whereas Listing Notice 2 (Regulation 984) activities require a full Environmental Impact Assessment (EIA) Process. Listing Notice 3 (Regulation 985) activities require a Basic Assessment Process if the area falls within certain geographic zones. Beeshoek Mine is not

characterised by gazetted Endangered Ecosystems, Critical Biodiversity Areas (CBAs) or located in proximity to a Protected or Conservation Area and for this reason Listing Notice 3 is not applicable to the mine.
This project will trigger both Listing Notice 1 and 2 activities.

The NEM:WA, Regulation 921, dated 29 November 2013 and as amended, makes provision for lists of waste management activities that have, or are likely to have a detrimental effect on the environment.

This project will trigger both Activity A and B waste management activities.

Chapter 4 of the NWA specifically addresses the use of water and is a tool for an authority to ensure the implementation of the principle that National Government has overall responsibility over water resource management, including the equitable allocation and beneficial use of water in the public interest, including that a person can only be entitled to use water if the use is permissible under the Act. In general, a water use must be licensed unless it is listed in Schedule I, is an existing lawful use, is permissible under a general authorisation, or if a responsible authority waives the need for a licence. Section 21 of the NWA identifies eleven (11) consumptive and non-consumptive water uses which must be authorised.

This project, depending on the final water balance may trigger Section 21a (abstraction), b (storage of clean water), c&i (activities within 500m of pan systems or watercourses), g (disposal of water or material containing waste), j (for dewatering for safe mining purposes).

For this project, the following will be considered as part of the specialist studies in terms of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA) are triggered when considering:

a) Archaeological artefacts, structures and sites older than 100 years;
b) Ethnographic art objects (e.g. prehistoric rock art) and ethnography;
c) Objects of decorative and visual arts;
d) Military objects, structures and sites older than 75 years;
e) Historical objects, structures and sites older than 60 years;
f) Proclaimed heritage sites;
g) Grave yards and graves older than 60 years;
h) Meteorites and fossils; and
i) Objects, structures and sites or scientific or technological value.

Section 34 of the NHRA deals with structures that are older than 60 years. Section 35(4) of the NHRA deals with archaeology, palaeontology and meteorites. Section 36 of the NHRA, deal with human remains older than 60 years. Unidentified/ unknown graves are also handled as older than 60 years until proven otherwise.
According to Regulation 38 of the NHRA, any development or other activity which will change the character of a site exceeding 5 000m^2 in extent requires notification to the South African Heritage Resources Agency (SAHRA). This process, as well as the outcomes of the heritage and paleontological study will be undertaken as part of the Environmental Authorisation process.

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mineral resources
Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

APPLICATION FORM FOR ENVIRONMENTAL AUTHORISATIONS IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 AND THE NATIONAL ENVIRONMENTAL MANAGEMENT WASTE ACT, 2008 IN RESPECT OF LISTED ACTIVITIES THAT HAVE BEEN TRIGGERED BY APPLICATIONS IN TERMS OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (MPRDA) (AS AMENDED).

IMPORTANT NOTICE

Kindly note that:

1. As from 7 April 2017, this document serves as the application form, and incorporates the requisite documents that are to be submitted together with the application for the necessary environmental authorisations in terms of the said Acts.

2. This application form is applicable while the Mineral and Petroleum Resources Development Amendment Act of 2008 is in effect; as the form may require amendment should the Act be further amended.

3. Applicants are required to apply for the necessary water use licence and any other authorisations nor licences to the relevant competent authorities as required by the relevant legislation. Upon acceptance of an application for a right or permit in terms of the MPRDA, applicants will be required to provide evidence to the Regional Manager that a water use licence has been applied for.

4. The Regional Manager will respond to the application and provide the reference and correspondence details of the Competent Authority, and in the event that the application for a right or permit is accepted, together with the date by which the relevant environmental reports must be submitted. Notwithstanding anything that may appear to be stated to the contrary in the acceptance letter, the timeframes are in fact aligned and the prescribed timeframes for the submission of documents as regulated by the NEMA regulations must be strictly adhered to.

5. The application must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. Spaces are provided in tabular format and will extend automatically when each space is filled with typing.

6. The failure to submit complete information as required in this application form may result in the refusal of the application for an environmental authorisation and consequently of the right or permit applied for.

7. This application must be submitted through the SAMRAD online application system of the Department of Mineral Resources under “Other documents to upload”.

8. Unless protected by law, all information filled in on this application form will become public information on receipt by the competent authority. Any interested and affected party should and shall be provided with the information contained in this application on request, during any stage of the application process.

9. Please note that an application fee is payable in terms of the National Environmental Management Act and the National Waste Management Act, which fees must be paid upon lodgement of the application. Should the said application fees not be paid as prescribed the application for a right or permit in terms of the Mineral and Petroleum Resources Development Act cannot be considered to have been made in the prescribed manner and the said application for a right or permit will have to be rejected. In this regard the type of applications must be identified in the table below.

PLEASE STATE TYPE OF AUTHORISATIONS BEING APPLIED FOR.

APPLICATION TYPE	APPLICABLE FEE	Mark with an X where applicable
NEMA S&EIR application on its own	R10 000.00	
NEMA BAR application on its own	R 2 000.00	
NEMWA S&EIR application on its own	R10 000.00	
NEMWA BAR application on its own	R 2 000.00	
NEMA S&EIR application combined with NEMWA S&EIR application	R 15 000.00	**x**
NEMA BAR application combined with NEMWA BAR application	R 3 000.00	
NEMA S&EIR application combined with NEMWA BAR application	R 11 000.00	

1 CONSULTATION BASIC ASSESSMENT AND/ OR SCOPING REPORT

NEMA APPLICATION (Full EIA, with Scoping Report)

EnviroGistics (Pty) Ltd (hereafter referred to as 'EnviroGistics') was appointed as the Environmental Assessment Practitioner (EAP) by the Proponent (Assmang (Pty) Ltd: Beeshoek Iron Ore Mine; hereafter referred to as 'Beeshoek' or 'the Mine') to undertake the required Environmental Authorisation Process for the proposed Beeshoek Mine Optimisation Project.

This application is for the purposes of an Environmental Impact Assessment (EIA) Process in terms of the National Environmental Management Act, 1998 (NEMA) Regulations 982 of 2014 (Regulation 983, Regulation 984 and Regulation 985) as amended in 2017; as well as the National Environmental Management: Waste Act, 2008 (NEM:WA) Regulation 921 of 2013 (as amended).

2 DETAILS OF THE APPLICANT

Project applicant:	Assmang (Pty) Ltd: Beeshoek Iron Ore Mine		
Registration no (if any):	35007343/06		
Trading name (if any):	N/A		
Responsible Person, (e.g. Director, CEO, etc.).:	Ms. Maryke Burger (Senior General Manager)		
Contact person:	Mr. Msimelelo Silomntu (Environmental Superintendent)		
Physical address:	Beeshoek Iron Ore Mine is situated on the farms Beesthoek and Olynfontein in the Hay Registration Division (RD). The specific farm portions on which the Mine is located include: Portion 0 of the farm Beesthoek 448 RD; Portion 1 of the farm Beesthoek 448 RD; and Portion 4 of the farm Olynfontein 475 RD.		
Postal address:	Private Bag X3002, Postmasburg, 8400		
Postal code:	8423	Cell:	+27 (0) 63 520 9191
Telephone:	+27 (0) 53 311 6666	Fax:	-
E-mail:	Msimelelo.Silomntu@assmang.co.za		

3 ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP) INFORMATION

EnviroGistics, established in 2015, provides independent environmental planning, permitting and consulting services to a vast array of clients throughout the mining, construction and development industry. EnviroGistics' independence is ensured with Ms Tanja Bekker being registered with both the South African Council for Natural Scientific Professions (SACNASP), and the Environmental Assessment Practitioners Association of South Africa (EAPASA) complying with all the requirements of the South African Environmental Legislation. EnviroGistics further holds no equity in this or any other project. EnviroGistics operates with the goal of fulfilling its vision and mission, breaking away from a general consulting mould, and striving to form an integral part of a project team. For this reason, clients are provided with experienced, practical, technically sound, independent, objective and value adding advice being ensured of support on environmental planning, permitting and compliance matters.

EnviroGistics is an independent company and has no vested interest in the outcome of the environmental assessment.

EAP:	**EnviroGistics (Pty) Ltd**		
Professional affiliation/registration:	Registered with the Environmental Assessment Practitioners Association of South Africa (EAPASA; Reg No. 306/2019). Professional Natural Scientist (Pr.Sci.Nat) in the field of Environmental Science with the South African Council for National Scientific Professions (SACNASP; Reg No. 400198/09) Member of the South African branch of the International Impact Assessment Association (IAIAsa) Member of the South African branch of the Environmental Law Association (ELA)		
Contact person (if different from EAP):	Ms. Tanja Bekker		
Company:	EnviroGistics (Pty) Ltd		
Physical address:	21 Gladiolus Street, Roodekrans, Roodepoort		
Postal address:	PO Box 22014, Helderkruin		
Postal code:	1733	Cell:	+27(0) 82 412 1799
Telephone:	+27(0) 82 412 1799	Fax:	+27(0) 86 551 5233
E-mail:	tanja@envirogistics.co.za		

Please refer to Appendix 1 for the Curriculum Vitae of the appointed EAP

4 PROJECT DESCRIPTION

Regulation 23 of the Mineral and Petroleum Resources Development Act, 2002 (MPRDA) states in Section 1(a), that subject to subsection 4, the Minister must grant a mining right if the mineral can be mined optimally in accordance with the mining work programme. The Mine has been awarded a Mining Right by the then Department of Mineral Resources [DMR; now Department of Mineral Resources and Energy (DMRE)] and therefore has an obligation to give effect to the following:

- The ongoing development and improvement of the Mining Work Programme which details the planned mining activities to be followed in order to mine the mineral resource optimally; and
- Undertaking optimal mining of minerals, as the Minerals and Petroleum Board ("the Board") may recommend to the Minister to direct the holder of a mining right to take corrective measures if the Board establishes that the minerals are not being mined optimally in accordance with the Mining Work Programme. The Minister may, on the recommendation of the Board, suspend or cancel a mining right if the Minister is convinced that any act or omission by the holder justifies the suspension or cancellation of the right.

Beeshoek Iron Ore Mine (hereafter referred to as "the Mine" or "Beeshoek") is actively investigating opportunities for the continued and sustainable mining of iron ore reserves within the approved Mining Right Area (MRA). This application for Environmental Authorisation specifically gives effect to that and includes the following projects:

1. Amendments to certain conditions which have been identified in the recent EMPr Environmental Audits, 2019 as "not sufficient or not practical" to address activities on site. The specific conditions which were identified for exclusion or amendment are the following (specifications on the amendments will be addressed in the EIA reports and based on the outcomes of the current specialist reports):
    - *An Environmental Audit Report as contemplated in regulation 55(1)(c) must be submitted bi-annually (from the date on which the permit was granted) to the Regional Manager: Mineral Regulations.*
    - *All vehicles will have mufflers to minimise noise emissions.*
    - *Vegetation of the soil stockpiles with suitable grass species in order to limit erosion of the outer slopes of the stockpiles.*
    - *Stockpile heights will be restricted to 1.5m.*
    - *Dust extraction systems comprising of wet scrubbers will be installed at the secondary and tertiary crushing and screening plants. For crushing and screening operations at metallic mineral processing plants, fugitive dust can be controlled with wet scrubbers or baghouses. Chemical dust suppression systems will be implemented at the primary crushing and screening plants.*
    - *Any storm water runoff from the outer slopes will contain some eroded residue solids. In order to prevent this from discharging into the surrounding environment, the side slopes of the WRDs will be dosed down to 1v:3h then covered with approximately 150mm topsoil and then grasses.*
    - *Re-vegetated areas will be maintained by means of regular watering, weed controls and cattle-grazing exclusion until the vegetation has settled to ensure that it is stable, and that erosion does not occur.*
    - *Surface water quality will be monitored to ensure that stipulated limits are not contravened.*
    - *After the topsoil has been replaced the area should be ameliorated and seeded, should self-succession of vegetation not take place.*
    - *The footprint (product and fines stockpiles) areas will be topsoiled and ripped.*
    - *The following measures will be implemented:*
        - *The areas will be landscaped to be free draining;*
        - *The topsoil and subsoils with the appropriate seedbed as stripped during the construction and operational phases will be placed over these areas to a depth as specified by a qualified specialist. The topsoil shall be appropriately ameliorated to allow vegetation to grow rapidly if required – it should be noted that the mine will*
        - *encourage self-succession of vegetation, if this does not take place effectively a revegetation project will be implemented;*
        - *If a reasonable assessment indicates that the re-establishment of vegetation is unacceptable slow, the soil needs to be analysed and any deleterious effects must be corrected, and the area be seeded with a seed mix to specification;*
        - *Appropriate erosion control measures (i.e. contour banks) must be taken where required;*

- *All rehabilitated areas will be fenced off at mine closure up until the area is regarded as stable; and*
- *All illegal invader plants and weeds shall be dealt with as required in terms of the relevant legislation.*

2. Specific demarcation of Run of Mine (ROM) Stockpiles;
3. Amendments to the design of existing Waste Rock Dumps (WRDs) in terms of the increase in heights, and allowance for final slope, which will result in extension of footprints;
4. Increase of opencast footprint areas, as well as the undertaking of detrital mining;
5. Beneficiation Plant Optimisation
    - Development of a new Jig Plant (this area will be located in the vicinity of the current plant) for the beneficiation of discard and low-grade iron ore, with all associated infrastructure;
    - Development of a WHIMS Plant for the beneficiation of slimes, with all associated infrastructure, including a Staging Stockpile;
    - Development of a new surface water dam (Central Process Dam) for the purposes of the Beneficiation Optimisation Projects (new Jig and WHIMS Plants); and
6. Development of supporting infrastructure such as water dams, power lines, roads, pipelines and improvements to storm water management systems where applicable.

The purpose of this project is to give effect to the Regulation 23 MPRDA requirements for the optimisation of Mining Works Programme, as well as the implementation of the best practical environmental management measures for the operation and management of the Waste Rock Dumps (WRDs). Further to this, the proposed Beeshoek Low-Grade Optimisation Project is to allow Beeshoek Mine to optimise the mining process and reduce mineral waste on site (in line with the National Waste Management Hierarchy), by implementing two additional Beneficiation Projects, namely a new WHIMS Plant to rework the existing slimes from the Slimes Dam and a new Jig Plant to rework the existing low-grade stockpile (Discard Dump). This project will have numerous economic and environmental benefits.

<table>
<tr><td>Farm Name:</td><td>Surface Rights Area to which this project relates:
o Portion 0 of the farm Beesthoek 448 RD;
o Portion 1 of the farm Beesthoek 448 RD; and
o Portion 4 of the farm Olynfontein 475 RD.</td></tr>
<tr><td>Application area (Ha)</td><td>Approximate areas of the Mine include:
Portion o of the farm Beesthoek 448 RD (1,543ha);
Portion 1 of the farm Beesthoek 448 RD (1,231ha); and
Portion 4 of the farm Olynfontein 475 RD (2,168ha).</td></tr>
<tr><td>Magisterial district:</td><td>The Mine is situated under the jurisdiction of the Tsantsabane Local Municipality, which is an administrative area of the ZF Mgcawu District Municipality.</td></tr>
<tr><td>Distance and direction from nearest town</td><td>Beeshoek is located in the Northern Cape Province, approximately 7km west of the town of Postmasburg. The mine site is traversed by the regional road R385, as well as the OREX railway line.</td></tr>
<tr><td>21 digit Surveyor General Code for each farm portion</td><td>
<table>
<tr><th>Farm Name</th><th>Registration Division</th><th>Portion</th><th>Ownership</th><th>Title Deed</th><th>SG Code</th></tr>
<tr><td>Beesthoek 448</td><td>RD</td><td>0</td><td>Assmang Ltd</td><td>T659/1965</td><td>C03100000000044800000</td></tr>
<tr><td>Beesthoek 448</td><td>RD</td><td>1</td><td>Assmang Ltd</td><td>T245/1954</td><td>C03100000000044800001</td></tr>
<tr><td>Olynfontein 475</td><td>RD</td><td>4</td><td>Assmang Ltd</td><td>T4859/1998</td><td>C03100000000047500004</td></tr>
</table>
Title Deeds attached in Appendix 2.</td></tr>
<tr><td>Locality map</td><td>Attached as Appendix 3.</td></tr>
<tr><td>Description of the overall activity. (Indicate Mining Right, Mining Permit, Prospecting</td><td>Beeshoek is situated in the Tsantsabane Local Municipality, with neighbouring towns being Postmasburg, located 7km east of the Mine and Kathu located 70km north of the Mine.

Mining at Beeshoek was established in 1964 with a basic hand sorting operation. In 1975 a full Washing and Screening Plant was installed. Because of increased production, Beeshoek South (South Mine), a southern extension of the Mine, was commissioned during 1999 on the farms Beesthoek and Olynfontein.</td></tr>
</table>

right, Bulk Sampling, Production Right, Exploration Right, Reconnaissance permit, Technical co-operation permit, Additional listed activity)	Assmang (Pty) Ltd is the holder of the new order rights in terms of the MPRDA in respect of high-grade hematite iron ore deposits at Beeshoek on the farms Beesthoek and Olynfontein. The mining method currently entails an opencast mining operation, which consists of five (5) active opencast pits (Village Opencast Pit, HF Opencast Pit, BF Opencast Pit, East Opencast Pit, and BN Opencast Pit). Although other opencast pits are dormant at this time, these are continuously assessed in terms of their economic value. The current resources of the Mine are approximately 97.17 million tonnes with a reserve of about 26.18 million tonnes. Beeshoek can be broadly categorised as follows: • Northern mining area (North Mine): This area comprises active as well as historical mining areas. A number of small quarries and mine residue dumps of various categories are located within this area. The area also includes the existing iron ore beneficiation plant, tailings storage facility (slimes dam), as well as various opencast pits. The BN Pit is the main operational opencast pit in this area; • Main offices, village (since demolished) and recreational area; and • Southern mining area (South Mine): This area comprises large opencast pits and associated Waste Rock Dumps (WRDs). The Village Opencast Pit and associated WRD are the main activities in this area. This area also includes a crushing and screening area as pre-preparation of the Run of Mine (ROM) iron ore before being routed by overland conveyor to the iron ore beneficiation plant located at North Mine. The projects in question are briefly summaries below: **Project 1: Consolidation of ROM Stockpiles on South Mine** In areas where individual ROM stockpiles are located, these will be consolidated to allow for further capacity and operational management. The sites required by the mine include: South ROM Stockpiles and the South BIS Stockpile. **Project 2: Amendments to the design of existing Waste Rock Dumps in terms of the increase in heights, and allowance for final slope, which will result in extension of footprints** The Mine indicated the need to increase the height of the Village Pit North WRD to 111m (currently approved at 45m) an upon rehabilitation 112m. In addition to this, there is a potential to increase various other WRDs height, which may include: • HF WRD; • GF WRD; • Discard Dump (for this an operational layout will suffice); • Village Pit North WRD; • West Pit WRD (Village Pit South WRD); and • East Pit WRD. The increase in the heights will also require an increase in the footprint areas to allow for the correct slope at closure. This project also includes the demarcation of the Discard Dump and associated footprint increase in this area. **Project 3: Increase of opencast footprint areas, as well as the undertaking of detrital mining** The Mine would like to make use of the opportunity to increase the approved footprints of active opencast pits, which will include: • BN Pit; • Village North Pit; • New Village East Pit; • New Village South Pit; • BF Pit expansion; • East Pit expansion, which includes the Future Pit; and • New detrital mining area.

Another mining method utilised on the mine is the mining of detrital ore, where the deposits of ore are shallow enough to be scooped out of the ground for processing as opposed to employing more extensive opencast mining methods. There are a few of these detrital zones on the mine area which still need to be exploited. According to the 2006 Environmental Management Plan (EMP) Alignment Report, the Mine will mine detrital ore that is available in small pockets that are easy to mine. Detrital mining entails the excavating of loose sedimentary deposited iron ore gravel material with other rock types present due to the sedimentary deposition process within dolomite karsts. The loose material is excavated and loaded, hauled and tipped into a feed bin and then separated into sizing to be fed as contaminated material to the existing Beneficiation Plant. The fines material from the screening plant is used as rehabilitation material back into the detrital mining area. Dolomite karst depth can vary from 4m to 25m deep in specific areas. The detrital mining strategy and depth is only determined once excavation starts and the quality of iron ore has been inspected within a karst deposition area.

One new haul road is proposed with a width of about 30m:

- Village Haul Road: 1,100m at width of 30m (about 3.3ha)

The BN Pit and WHIMS Plant Haul Roads will be located in areas that are mostly disturbed by existing mining activities or along existing roads.

Project 4: Optimisation of Beneficiation and implementation of the Waste Management Hierarchy
To allow Beeshoek to optimise the mining process and reduce mineral waste on site (in line with the National Waste Management Hierarchy), the Mine wishes to implement two additional Beneficiation Projects, namely a new WHIMS Plant to rework the existing slimes from the Slimes Dam and a new Jig Plant to rework low-grade material from the plant processing operations and the existing Low-Grade Stockpile (Discard Dump). This project will have numerous economic and environmental benefits.

Economic Benefit:
Section 23(1)(a) of the MPRDA states that subject to subsection (4), the Minister must grant a mining right if the mineral can be mined optimally in accordance with the mining work programme. The Mine has been awarded a Mining Right by the DMR and therefore has an obligation to give effect to the following:

- The ongoing development and improvement of the Mining Work Programme which details the planned mining activities to be followed in order to mine the mineral resource optimally; and
- Undertaking optimal mining of minerals, as the Minerals and Petroleum Board may recommend to the Minister to direct the holder of a mining right to take corrective measures if the Board establishes that the minerals are not being mined optimally in accordance with the Mining Work Programme. The Minister may, on the recommendation of the Board, suspend or cancel a mining right if the Minister is convinced that any act or omission by the holder justifies the suspension or cancellation of the right.

The project will ensure that low-grade ore in the existing low-grade residue stockpiles (Slimes Dam and Discard Dump) can be reworked, thereby also reducing the volumes of waste stored on site, reducing the associated financial rehabilitation requirements and potential environmental impacts.

Giving effect to Waste Reduction
The reworking of the low grade waste gives effect to the Waste Management Hierarchy as presented in the National Waste Management Strategy, November 2011 and also the draft Strategy of 2020. The 2011 Strategy states the following:

- A challenge experienced is the lack of a policy and regulatory environment that does not actively promote the Waste Management Hierarchy.
- The report states that while the elimination of waste in its entirety may not be feasible, it is possible through the systematic application of the Waste Management Hierarchy to reach a point within the next few decades where re-use, recycling, recovery and treatment overtake landfills as preferred options for waste management.
- The first goal presented in this strategy as a strategic goal is to “promote waste minimisation, reuse, recycling and the recovering of waste” by focusing on implementing the Waste Management Hierarchy, and with the ultimate aim of diverting waste from landfill.

The following is an abstract of Section 2.3 of the National Waste Management Strategy, 2011:

2.3 Waste Management Hierarchy

Figure 1: Waste management hierarchy

The objects of the Waste Act are structured around the steps in the waste management hierarchy, which is the overall approach that informs waste management in South Africa. Therefore, the NWMS follows the waste management hierarchy approach.

The waste management hierarchy consists of options for waste management during the lifecycle of waste, arranged in descending order of priority. All stakeholders must apply the waste management hierarchy in making decisions on how to manage waste.

The Waste Management Hierarchy in the National Waste Management Strategy is summarised as follows:

- Waste avoidance and reduction;
- Re-use;
- Recycling;
- Recovery; and
- Treatment and disposal.

The foundation of the hierarchy, and the first choice of measures in waste management, is avoidance and reduction. This step aims for goods, in the sense of this project, processing plants, to be designed in a manner that minimises their waste components. Also, the reduction of the quantity and toxicity of waste generated during the production process is important.

The next stage of the hierarchy is re-using waste. Re-using an article removes it from the waste stream for use in a similar or different purpose without changing its form or properties.

After re-use comes the recycling of waste, which involves separating articles from the waste stream and processing them as products or raw materials.

These first four stages of the Waste Management Hierarchy are the foundation of cradle-to-cradle waste management. This approach seeks to re-use or recycle a product when it reaches the end of its life span. In this way, it becomes input for new products and materials. This cycle repeats itself until as small a portion as possible of the original product eventually enters the next level of the Waste Management Hierarchy: recovery.

As a last resort, waste enters the lowest level of the hierarchy to be treated and/or disposed of, depending on the safest manner for its final disposal.

Taking this strategy further, is the current draft National Waste Management Strategy of 2020, which has as yet not been promulgated. This strategy also focusses on the circular economy. A circular economy redefines economic growth by moving away from a take-make-waste industrial model to one that decouples economic activity from the environment and supports a just transition to renewable energy sources. The three key principles of a circular economy are: design out waste and pollution, keep products and materials in use and regenerate natural systems. The two (2) strategic entry points of the waste sector into waste minimisation and the circular economy is waste prevention and waste as a resource, as briefly explained below.

- Waste Prevention (as highlighted in the 2011 National Waste Management Strategy) – this emphasises avoiding and reducing waste before substances, materials and products are discarded.

- Waste as a Resource (key focus in the draft Strategy) – this focuses on stimulating a secondary resources economy based on recycling and recovery of materials and energy from waste i.e. interventions that take place after a product or material has become waste. Circularity can deliver substantial material savings throughout value chains and production processes, generate extra value, transformation of industry towards climate-neutrality, long-term competitiveness and unlock economic opportunities. In terms of the waste management hierarchy practices, recycling of waste for reuse and recovery of materials is prioritised over recovery of energy from waste. The main economic driver lies in exploiting the full potential value of waste.

Giving effect to an approved Environmental Activity as part of Environmental Management and Impact Reduction:
The 2004 Beeshoek EMP clearly states that the mine residue present on site or produced by the Mine can be categorised as follows:

- Waste material: products that cannot be sold and which are deposited separately as such or used as backfill;
- Non-saleable material: product which cannot be marketed in its present form but which through treatment could become saleable;
- Contaminated material: "impure" product stockpiled separate for beneficiation to render it marketable; and
- Discard: waste material from the on-site iron ore beneficiation plant is discarded on a designated Discard Dump for reuse (i.e. reworking).

The 2004 EMP further explains the Mine's intention to rework all contaminated (as from the EMP – which refers to low-grade) iron ore stockpiles present on the mine site in order to optimise iron ore resource utilisation. Reworking relates to the following dumps: Dumps labelled on Drawings 5540-001 and 5540-002 as CD-N1 (this is the current WRD North Area) and CD-S1 (this is the current Contaminated ROM Dump on South Mine), respectively.

In Section 1.7.3 of the new order (aligned) EIA, 2009 the Estimated Reserves are discussed. It states that: "Additional iron ore is available in the contaminated dumps on the mine site and these will be reworked to meet the Mine's remaining planned life of mine." The specific contaminated dumps are not stipulated in this EMP, and therefore when referring to the definition of contaminated material in the 2004 EMP as presented above, this will depend on the nature of the material and grade which will render it marketable. The EMP further commits in Section 7.3.2 to "Rework all the contaminated iron ore stockpiles present on the mine site in order to optimise iron ore resource utilisation."

In terms of the NEM:WA, and associated regulations which came into effect on 24 July 2015, which included Mine Residue Stockpiles as listed Waste Management Activities, all such activities that commenced prior to 24 July 2015, may be regarded as lawful and need not be authorised (regulation 7(1) of GN 921 contains the relevant transitional requirements), on condition that such are approved/included in terms of a MPRDA EMPr. Prior to the NEM:WA Regulations of 2015, the reclamation of residue for re-use did not require EMP amendments, as it fell within the definition of mining (as defined in the MPRDA), especially in this instance where no separate infrastructure (e.g. crushing plants) was constructed that had to be reflected in the EMPs.

The Mine Residue Stockpiles directly listed in the 2004 EMP for reworking includes:

- WRD North Area; and
- Contaminated ROM Dump South Mine.

The Mine Residue Stockpiles which have been earmarked for rework as Contaminated Stockpiles (when considering the 2009 EMP definition) are:

- Contaminated ROM Dump North Mine; and
- All off-grade ROM Stockpiles.

The Mine Residue Stockpiles which have been reworked prior to the inclusion of Mine Residue Stockpiles into the NEM:WA on 24 July 2015 include:

- Discard Dump, North Mine – commenced during 2005.
- Slimes Dam, North Mine – reworking of this material commenced during 2012.

According to a legal enquiry submitted to the DMR (now DMRE) on 26 July 2017 the following is noted:

> Firstly, regarding the remining of residue deposits and stockpiles, the following must be noted. Section 1 of NEMWA defines residue deposits and stockpiles in relation to the definition provided for in the MPRDA.
> The MPRDA defines residue stockpile as ***"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"***.
> (own emphasis)
> In addition to the above, please note that Schedule 3 of the NEMWA expanded the definition of residue stockpile to – ***"any… discard… waste rock,… including historic mines and dumps created before the implementation of this Act"***.
> (own emphasis)
> It is also paramount to note the applicable transitional arrangements. Regulation 4 of the *NEMWA: Amendments to the List of Waste Management Activities that Have, or are Likely to Have, a Detrimental Effect on the Environment* (GN R633 in GG 39020 of 24 July 2015) states that ***"an environmental management programme or plan approved in terms of the Mineral and Petroleum Resources Development Act, 2002 shall be deemed to have been approved and issued in terms of this Act."***
> Furthermore, Regulation 7(1) of the new NEMWA Listing Notice states that ***"a person who lawfully conducts a waste management activity listed in this Schedule on the date of the coming into effect of this Notice may continue with the waste management activity…"***.
> Accordingly, activities which were/are approved in terms of the EMP must be deemed to be approved in terms of the NEMWA.

The response by the DMR, Kimberley was positive in this regard and the activities are considered lawful (please refer to **Error! Reference source not found.Error! Reference source not found.** for the correspondence in this regard. In this regard the mine has identified the need to include two additional plants to the beneficiation circuit of the mine, namely the WHIMS Plant and the new Jig Plant.

- WHIMS Plant
  - WHIMS Plant which will beneficiate slimes from the Slimes Dam and arising material from the existing Beeshoek Plant;
  - WHIMS Construction Laydown Area: approx. 1.5ha.
  - Within the laydown area, a 2 500m^2 Staging Stockpile comprising low grade feed material will be located. This will be a designed facility which will feed the WHIMS Plant. This material will be processed material (i.e. raw material) derived from the Tailings Storage Facility (Slimes Dam, a mineral waste) All waste (oversize from the Oversize Discard Bunker and slimes) will be disposed of onto the existing Slimes Dam and no new mine residue Stockpile will be developed.
  - WHIMS Plant footprint, including access road of 160m, no wider than 30m: approximately. 4ha.
  - WHIMS Plant Central Process Water Dam: 0.4ha, capacity planned at 5 000m^3.
  - WHIMS Plant Clarifier: tank diameter 56m, capacity 9 700m^3.
  - WHIMS Plant Emergency Product Stockpile: 21m^2 within WHIMS Plant footprint area.
  - WHIMS 1mm Product Stockpile: 300m^2 within the WHIMS Plant footprint area.
  - Tailings Pipeline HDPE: 315mm diameter at 750m^3/hr (208.3l/s):
    - 1.1km (new WHIMS Plant clarifier to northern perimeter of Slimes Dam;
    - 1.4km (new WHIMS Plant clarifier to southern perimeter of Slimes Dam; and
    - existing pipeline of 1.3km to be rerouted from existing thickener directly to the new WHIMS Plant.
  - Return Water Pipeline HDPE, 280mm diameter at 400m^3/hr (111l/s): - 1.1km (re-routing of existing pipeline from Tailings Storage Facility (Slimes Dam) to Whims Plant clarifier).

- Process Water Pipelines: 350mm diameter - 1.3km (replacement of existing pipeline with new pipeline from Central Water Dam to new Process Water Tank (2 000m^3) adjacent to existing Clarifier).
- Water from Central Process Dam to Existing Beeshoek Plant: 200mm mild steel – 1.3km at 400m^3/hr (111l/s).
- New potable water pipeline 140mm diameter - 1.6km 100 m^3/hr (28l/s) from steel potable water tank (100m^3) at the new Jigs Plant to combined steel potable water/fire water tank (approximately 1 000m^3, still to be confirmed pending final designs) at WHIMS Plant.
- Process water tank (1000m^3) adjacent to new WHIMS Plant Clarifier. and
- Overland Powerline: 22kV powerline approx. 700m in length.

New Jig Plant

- New Jig Plant footprint: approx. 2.6ha.
- New Jig Plant Construction Laydown Area: 2ha on existing Discard Stockpile footprint.
- Feed from the existing Discard Dump (low-grade material fed into a loading bin by means of front end loaders and conveyed to the Washing and Screening Plant);
- Washing and Screening Plant;
- Crusher building containing a high pressure grind roll (HPGR) crusher;
- Jig located in the Jig building;
- MCC and transformer bay;
- Re-routed existing water pipelines (buried, internal diameter 450mm);
- Slurry from the new Jig Plant will be pumped to the existing Plant Thickener;
- New process water tank (located near existing Plant Thickener) – 2,000m^3 (this forms part of project 5).
- Stockpiles [comprising of both material from the Discard Dump (also referred to as a Low Grade Stockpile] and arising low grade material from the existing Jig Beneficiation Plant). The stockpiles created from material reclaimed from the existing Low Grade Stockpile (Discard Dump) and the stockpile created with the arising material (low grade) from the existing Jig Beneficiation Plant are intermediate stockpiles created within the footprint of the existing Discard Dump (the Low Grade Intermediate Stockpile and the Arising Stockpile). Material from these intermediate stockpiles is transported to and fed into the new Jig Plant loading bin located south of the existing Low Grade Stockpile. Low low grade material from the new Jig Plant is then conveyed back to the Low Grade Stockpile footprint, deposited onto the ground and then moved back towards the existing Discard Dump. The three (3) stockpiles associated with the new Jig Plant includes the following:
  - Low Grade -32+1mm Stockpile (Intermediate) (0,5ha) located between the existing Low Grade Stockpile (Discard Dump) and the new Jig Plant loading bin on the existing Low Grade Stockpile foot print. Low grade material transported to and from the intermediate stockpile by means of front end loaders.
  - Arising -32+1mm Stockpile (Intermediate) (0.6ha) located between the to be constructed arisings conveyor discharge position and the new Jig Plant loading bin and within the existing Low Grade Stockpile footprint. Low grade material transported from the Arising -32+1mm Stockpile by means of front end loaders.
  - Low low grade material from the new Jig Plant will be conveyed by means of earth moving equipment to positions adjoining the existing Discard Dump

within the existing footprint (i.e. waste from the new Jig Plant to return to the approved Discard Dump footprint). No new stockpiles will be constructed outside of the demarcated Discard Dump or other Type 3 Stockpile footprints, these will however be demarcated as part of the EMPr and WUL processes. The area of the Low low Grade Dump (stockpile) (115m^2).

- New Jig Plant Conveyors:
  - Approx. 25m conveyor from existing plant conveyor system to feed Jig Plant with low grade arising material;
  - Approx. 330m conveyer to feed the new Jig Plant from Discard Dump to feed Discard feed bin.
- New Jig Plant Roads, which are all connected:
  - Road 1: 240m with a width of 30m.
  - New Jig Plant Road 2: 700m with a width of 30m.
  - Road 3: 280m with a width of 30m.
  - Road 4: 135m with a width of about 30m
  - Decommissioning of existing plant haul road: approximately 1000m in length and 30m wide.
- Overhead Powerline: 22kV powerline of approx. 620m;
- Rerouting of underground electrical cable: 22kV of approx. 380m.

Project 5: Water Management

The Mine will also establish additional water storage tanks on site which will include:

- A new additional storage tank near the existing BN Tank of 500m^3. The purpose is to provide sufficient storage space for water from the approved in-pit dewatering activities;
- 4x 10m^3 plastic tanks at the existing clarifier, thickener area. To allow for the storage of water in the water balance system of the mine to capacitate the plant process to start up without delay;
- 1 x 2000 m^3 process water tank adjacent to the existing Clarifier connected with a “balancing pipe”. To allow for the storage of water in the water balance system of the mine to capacitate the plant process to start up without delay;
- Existing Dam: Steel Dam 250m^3 with capacity to store process water and allow for the storage of top-up water;
- Existing Dam: Zinc Dam: 90m^3 with capacity to store input water where required.

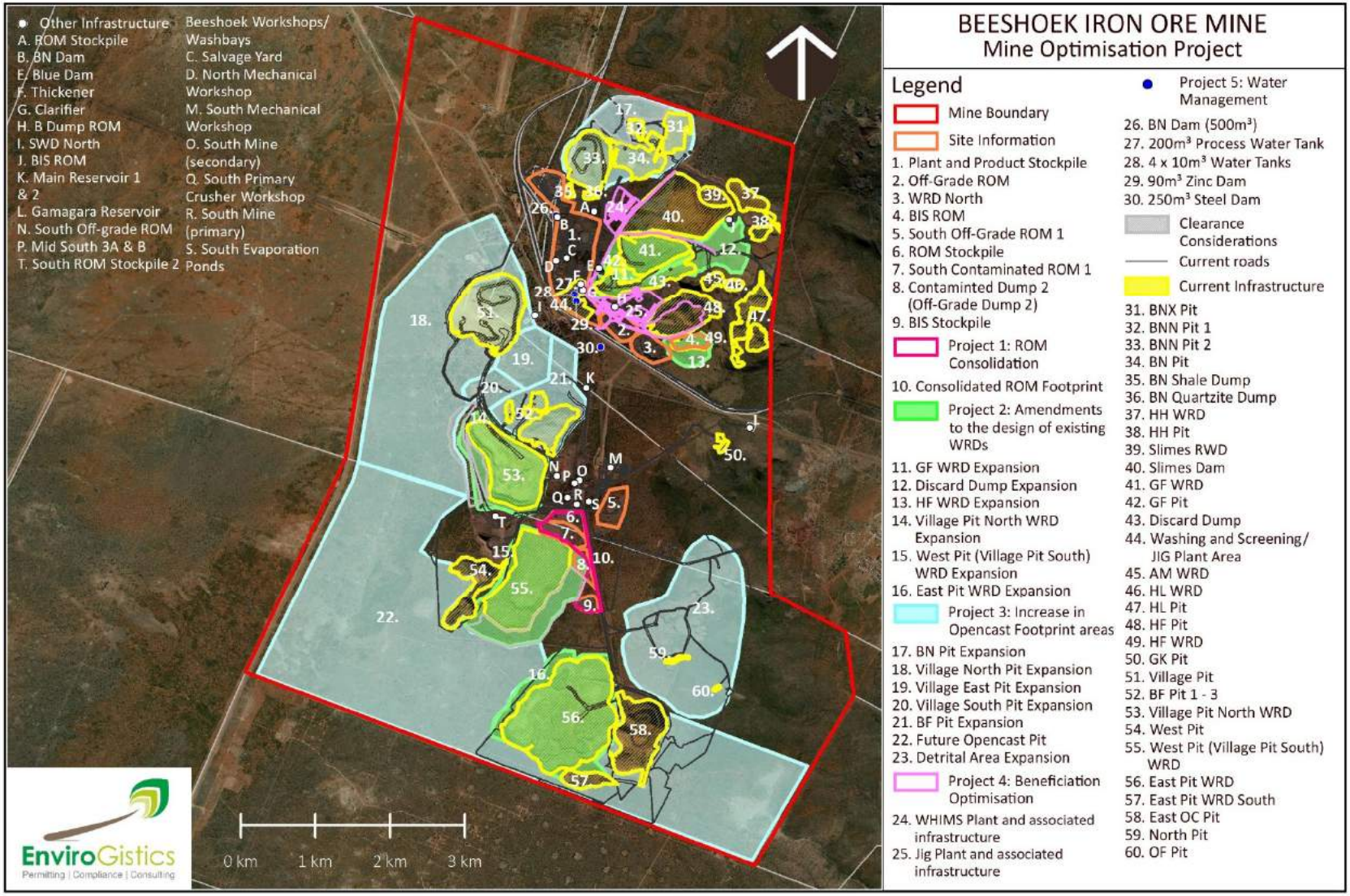

Figure 1: Infrastructure layout

5 ACTIVITIES TO BE AUTHORISED

(Please provide copies of Environmental Authorisations obtained for the same property as (**Appendix 4).**
(For an application for authorisation that involves more than one listed activity that, together, make up one development proposal, all the listed activities pertaining to this application must be indicated. Please note that any authorisation that may result from this application will only cover activities specifically applied for).(Attach a proposed site plan, drawn to a scale acceptable to the competent Authority, showing the location of all the activities to be applied for, as **Appendix 3.**

INTEGRATED NEMA AND NEM:WA APPLICATION

NAME OF ACTIVITY	Aerial extent of the Activity (Ha or m²)	LISTED ACTIVITY (Mark with an **X** where applicable or affected).	APPLICABLE LISTING NOTICE ***(GNR 983, GNR 984 or GNR 985)***	WASTE MANAGEMENT AUTHORISATION (Indicate whether an authorisation is required in terms of the Waste Management Act). **(Mark with an X)**	WATER USE LICENCE ACTIVITES **Section 21 Water Uses**
Project 1: Consolidation of Run of Mine (ROM) Stockpiles on South Mine	The ROM stockpile area on South Mine will be demarcated as a combined ROM stockpile area for both on-grade, off-grade and BIS. Overall Area: 35ha [no clearance of vegetation is required; this area is located on the north-eastern perimeter of the West Pit WRD (now the Village Pit South WRD) in a legally disturbed area] The current Water Use Licence (WUL) allows for the following ROM deposition on the stockpile in question – note that the deposition of ROM will not increase in annual throughput: • South Contaminated ROM 1: 4 450 000t/a • South Contaminated ROM 2 Off-Grade ROM Stockpile, including BIS: 1 920 000t/a • ROM Stockpile: 720 000t/a	x	Part 1, Regulation 29: "An environmental authorisation may be amended by following the process prescribed in this Part if the amendment; a) Will not change the scope of a valid environmental authorisation nor increase the level or nature of the impact, which impact was initially assessed and considered when the application was made for an environmental authorisation; or **b)** Relates to the change of ownership or transfer of rights and obligations". The change in the footprint, combining the area for the purposes of an overall ROM footprint will trigger an amendment to the current layout.	**Not Applicable (N/A)**	**N/A**
Project 2: Amendments to the design of existing Waste Rock Dumps (WRDs) in terms of the increase in heights, and allowance for final slope, which will result in extension of footprints	• Village Pit North Waste Rock Dump: Current area approximate 70ha, to be increased with approximately 26ha (final area 96ha) to allow for final slope and footprint upon rehabilitation (area pending designs, but will involve clearance of about 25ha) – this will also remove the required Storm Water Dam, which was a recommendation in its associated EMPr for the Village Pit WRD EMPr, but has as yet not been constructed, due	x	**Listing Notice 1, Activity 12:** The development of—dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs— (a) within a watercourse;	It is assumed that Category B, Activity 15: The establishment or reclamation of a residue stockpile or residue deposit resulting from activities which requires a prospecting right or mining right in terms of the MPRDA is not relevant as no	Yes – Section 21(g) for the waste rock dump expansions and potential Section 21 (c)&(i) for the presence of various dry pans in the area. GN704 Exemption requirements for the operation of unlined Mine Residue Deposits.

NAME OF ACTIVITY	Aerial extent of the Activity (Ha or m²)	LISTED ACTIVITY (Mark with an **X** where applicable or affected).	APPLICABLE LISTING NOTICE ***(GNR 983, GNR 984 or GNR 985)***	WASTE MANAGEMENT AUTHORISATION (Indicate whether an authorisation is required in terms of the Waste Management Act). **(Mark with an X)**	WATER USE LICENCE ACTIVITES **Section 21 Water Uses**
	to the low run-off in this area and subsequent storm water management studies - The decommissioning of the SWD will not trigger a listed activity as the "active activity" does not entail an "operational component"). Planned operational height is 111m (upon rehabilitation 112m). - GF Waste Rock Dump: Current area approximately 48ha, to be increased by about 6ha (final area about 54ha) to allow for final slope and footprint upon rehabilitation (area pending designs). Based on the location of this WRD between the Discard Dump and the existing Slimes Dam it is unlikely that any clearance will be triggered. Planned operational height is 82m (upon rehabilitation 84m). - East Pit Waste Rock Dump: Current area approximately 144ha, to be increased by about 26ha (final area about 170ha) to allow for final slope and footprint upon rehabilitation (area pending designs, but will involve clearance in excess of 25ha). Planned operational height is 94m (upon rehabilitation 94m). - West Pit Waste Rock Dump (now referred to as Village Pit South WRD): Current area approximately 80ha, to be increased with about 55ha (final area 135ha) to allow for final slope and footprint upon rehabilitation (area pending designs, but will likely involve clearance of about 35ha). Planned operational height is 98m (upon rehabilitation 106m). - HF Waste Rock Dump (new dump on historic dump footprint): Current area approximately 20ha and used for BIS stockpiling, to be reused to allow for HF Pit waste rock disposal, as well as final slope and footprint upon rehabilitation (area pending designs). This area is located on an existing WRD footprint (no additional		(b) in front of a development setback; or (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse. **Listing Notice 1, Activity 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 cubic metres from watercourse. **Listing Notice 2, Activity 15**: The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for— the undertaking of a linear activity. **The specific height of the Village WRD and the Product Stockpiles as stipulated in their respective EMPs will be increased as part of this EIA Application – this will be considered as included in a Regulation 29 Part 2 amendment which replace the height stipulations as presented in the prior EMPs. The increases in heights do not trigger specific listing notices, however the associated footprints to achieve final closure slope will trigger a Waste Management Licence Activity.**	additional mining rights are required and the activities entail the expansion of approved facilities. For that reason: Category A waste activities, #13: The expansion of a waste management activity listed in Category A or B of this Schedule which does not trigger an additional waste management activity in terms of this Schedule is more relevant.	

NAME OF ACTIVITY	Aerial extent of the Activity (Ha or m²)	LISTED ACTIVITY (Mark with an **X** where applicable or affected).	APPLICABLE LISTING NOTICE (*GNR 983, GNR 984 or GNR 985)*	WASTE MANAGEMENT AUTHORISATION (Indicate whether an authorisation is required in terms of the Waste Management Act). **(Mark with an X)**	WATER USE LICENCE ACTIVITES **Section 21 Water Uses**
	clearance therefore required). Planned operational height is 39m (upon rehabilitation 63m). • Discard Dump: Current area approximately 28ha, to be increased to about 60ha. This area is located within the mining area, between WRDs, Slimes Dam and Opencast Pits, no clearance will be required. The heigh of the facility is planned to be up to 60m. Current WUL allows for the following deposition – note that the deposition of material will not increase in annual throughput, however the life of mine and total capacity/footprint will increase: o Village Pit North WRD: 31 500 000t/a o West Pit WRD (now the Village Pit South WRD): 21 413 403t/a o GF WRD: 7 721 766/a o HL Waste Rock Dump: 10 983 334t/a o BIS ROM North 1 – 2 +50 000t/a (on historic HF WRD) o East Pit Waste Rock Dump: 68 850 000t/a o Discard Dump: 9 000 000t/a				
Project 3: Increase of Opencast Footprint Areas, as well as the undertaking of detrital mining for shallow iron ore reserves, including transportation routes (Haul roads)	• Village North Opencast Pit (VP North), will be expanded by 375ha in the future to 436ha and will further include two satellite pits: Pit East and Pit South, each with and area of about 37ha and 22ha respectively. Clearance of vegetation will be required. The depth of the VP North is planned at 180m, with VP East and VP South 160m and 60m respectively. • BN Pit area is planned to be expanded by 66ha to approximately 137ha. The depth of the opencast pit will be 162m from surface. Approximately 25ha will require vegetation clearance.	x	**Listing Notice 1, Activity 12:** The development of—dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs— (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse. **Listing Notice 1, Activity 19**: The infilling or depositing of any material of more than 10	**N/A**	Yes – Section 21 (c)&(i) for the presence of various dry pans in the area. Section 21 (j) for the abstraction of water for safe mining conditions, and the use thereof as Section 21(a) water uses.

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	• EP Opencast Pit, will entail a substantial increase from about 50ha to about 1026ha. The Future Pit, linked to the East Pit is a planned new pit which will comprise of an area of an additional 976ha. This area will likely be a result of various smaller satellite pits. However for the purposes of the EIA process the overall area is considered. Clearance of vegetation will be required. For this activity it is important to note that the future pit is in its planning phase, further exploration will be required in this area. Once the final designs for the mining schedule is available this will be submitted to the DMRE for approval. It will also be at this time that a detailed waste management strategy will be developed for the management of waste rock and overburden in this area. Once this information is available the necessary Waste Management License and Water Use License will be applied for from the DMRE and DWS respectively. The depth of East Pit is planned at approximately 220m. • The BF Pit will be expanded from about 30ha (comprising of 3 pits) to about 86ha. Approximately 25ha may require clearance. The dept of the BF Pit is planned at 180m. • A Detrital Mining area of about 238ha will be established – it should be noted that entire area will not be utilised, only where minerals are found economically viable. Clearance of vegetation will be required. Mining in the detrital area is planned between 20-40m in depth. One new haul roads is proposed: • Village Haul Road: 1,100m at a width of 30m (about 3.3ha)		cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than cubic metres from watercourse. **Listing Notice 1, Activity 24**: The development of a road—with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres; but excluding a road—which is 1 kilometre or shorter. **Listing Notice 2, Activity 15**: The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for— the undertaking of a linear activity.		

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	The road will be located in areas mostly disturbed with exiting mining activities or along exiting roads.				
Project 4: Development of the Beneficiation Project which will comprise of a WHIMS Plant and Jig Plant at Beeshoek	WHIMS Plant o WHIMS Construction Laydown Area: approximately 1.5ha. o Within the laydown area, a 2 500m² Staging Stockpile comprising low grade feed material will be located. This material will be processed material (i.e. raw material) derived from the Slimes Dam. All waste (oversize and slimes) will be disposed of onto the existing Slimes Dam and no new Mine Residue Stockpile will be developed. o WHIMS Plant Clarifier with a capacity of 9 700m³. o WHIMS Plant footprint, including access road of 160m in length (approximately 4ha). o WHIMS Plant Central Process Dam: 0.4ha, with capacity of 5 000m³. o WHIMS Plant Emergency Product Stockpile: 21m² within WHIMS Plant footprint area. o WHIMS 1mm Product stockpile: 300m² within the WHIMS Plant footprint area. o Tailings Pipeline HDPE: 315mm diameter at 750m³/hr (208.3l/s): ▪ 1.1km pipeline from the WHIMS Plant Clarifier to the northern perimeter of Slimes Dam; ▪ 1.4km from the WHIMS Plant Clarifier to the southern perimeter of the Slimes Dam; and	Yes: Tailings Pipeline between WHIMS Plant and Slimes Dam.	**Listing Notice 1, Activity 10:** The development and related operation of infrastructure exceeding 1 000 metres in length for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes – (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—such infrastructure is for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes inside a road reserve or railway line reserve.	Category B, Activity 15: The establishment or reclamation of a residue stockpile or residue deposit resulting from activities which requires a prospecting right or mining right in terms of the MPRDA. This will be applicable at the WHIMS Plant for the new transfer and feed stockpiles (specifically the Staging Stockpile, which will be a designed facility). The reworking of the discard, low grade material and slimes are existing approved activities on site in terms of the approved EMPr, 2009. However for the purposes of the application, these activities will be clearly described and listed. Note that the Jig Feed Stockpile (intermediate stockpile) will not trigger new WMLs as these will be placed on existing approved WRD footprints and are regarded as ROM feed stockpiles. All final low grade will be deposited back onto the Discard Dump. However the	Yes – Section 21 (g) and (b) water uses WHIMS: 1000m³ Process Water Tank; 9 700m³ Clarifier; 5000m³ Central Process Water Dam; 1000m³ Potable/fire Water Tank; Emergency Plant Stockpile (20m3 at any given time), Staging Stockpile (capacity 6 000m³) and 1mm Product Stockpile (capacity 1 000m³), Sewage Conservancy Tank of 6m³. Jig: 100m³ Potable Water Tank, Intermediate Stockpile (capacity 5 500m³), Arising Stockpile (capacity 6 000m³) and Low low grade Stockpile (capacity 118m³), Sewage Conservancy Tank of 6m³.
		Potentially – provision is made for the storage of chemicals where required within the confines of the Plant footprint areas.	**Listing Notice 1, Activity 14:** The development and related operation of facilities or infrastructure, for the storage, or for the storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres.		
		Yes – the current design indicates the need for road development (Road 1 and 2) at the Jig Plant which will be around 1km.	**Listing Notice 1, Activity 24**: The development of a road—with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres; but excluding a road—which is 1 kilometre or shorter.		

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	▪ existing pipeline of 1.3km to be rerouted from the existing Beneficiation Plant Thickener directly to the WHIMS Plant. o Return Water Pipeline HDPE, 280mm diameter at 400m³/hr (111l/s): 1.1km (rerouting of existing pipeline from Slimes Dam to WHIMS Plant Clarifier). o Process Water Pipelines (throughput below 120l/s): 350mm diameter - 1.3km [replacement of existing pipeline with new pipeline from Central Water Dam to new Process Water Tank (2 000m³ – see project 5 below) adjacent to exiting Beneficiation Plant Clarifier]. o Water from Central Water Dam to existing Beeshoek Plant: 200mm mild steel – 1.3km at 400m³/hr (111l/s). o New potable water pipeline 140mm diameter – 1.6km In length with a throughput of 28l/s from the steel potable water tank (100m³) at the new Jig Plant to combined steel potable water/fire water tanks (approximately 1000m³) at the WHIMS Plant. o Overland Powerline: 22kV powerline of approximately 700m in length. New Jig Plant o New Jig Plant footprint: approximately 2.6ha on already disturbed areas.	For the purposes of this application this listed activity is included for design planning.		Arising Stockpile and Low low grade stockpile will be regarded as new WMLs as these will be derived from the current Discard Dump.	
		Yes (WHIMS Plant)	**Listing Notice 1, Activity 27**: The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous **vegetation** is required for— except for the undertaking of a linear activity.		
		Yes, new clarifier at the current Jig Plant	**Listing Notice 1, Activity 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— (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 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.		

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	○ New Jig Plant Construction Laydown Area: 2ha on existing Discard Dump footprint. ○ Feed from the existing Discard Dump (low-grade material fed into a loading bin by means of front end loaders and conveyed to the Washing and Screening Plant); ○ Washing and Screening Plant; ○ Crusher building containing a high pressure grind roll (HPGR) crusher; ○ Jig located in the Jig building; ○ MCC and transformer bay; ○ Re-routed existing water pipelines (buried, internal diameter 450mm); ○ Slurry from the new Jig Plant will be pumped to the existing Plant Thickener (no new activities triggered); ○ New process water tank (located near existing Plant Thickener) – 2,000m³ (this forms part of Project 5). ○ Stockpiles [comprising of both material from the Discard Dump (also referred to as a Low Grade Stockpile] and arising low grade material from the existing Jig Beneficiation Plant). The stockpiles created from material reclaimed from the existing Low Grade Stockpile (Discard Dump) and the stockpile created with the arising material (low grade) from the existing Jig Beneficiation Plant are intermediate stockpiles created within the footprint of the existing Discard Dump (the Low Grade Intermediate Stockpile and the Arising Stockpile). Material from these	Depending on the final road layout, certain existing roads may be redesigned. Yes, a WUL will be required for the construction of the Central Water Dam at the WHIMS Plant, stockpiles and potentially for smaller transfer tanks within the two plant systems.	**Listing Notice 1, Activity 56**: The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre—where the existing reserve is wider than 13,5 meters; or where no reserve exists, where the existing road is wider than 8 metres. **Listing Notice 2, Activity 6**: The development of facilities or infrastructure for any process or activity which requires a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent. This will be specific to new dirty water tanks and new Process Water Dam.		

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	intermediate stockpiles is transported to and fed into the new Jig Plant loading bin located south of the existing Low Grade Stockpile. Low low grade material from the new Jig Plant is then conveyed back to the Low Grade Stockpile footprint, deposited onto the ground and then moved back towards the existing Discard Dump. The three (3) stockpiles associated with the new Jig Plant includes the following: ▪ Low Grade -32+1mm Stockpile (Intermediate) (0,5ha) located between the existing Low Grade Stockpile (Discard Dump) and the new Jig Plant loading bin on the existing Low Grade Stockpile foot print. Low grade material transported to and from the intermediate stockpile by means of front end loaders. ▪ Arising -32+1mm Stockpile (Intermediate) (0.6ha) located between the to be constructed arisings conveyor discharge position and the new Jig Plant loading bin and within the existing Low Grade Stockpile footprint. Low grade material transported from the Arising -32+1mm Stockpile by means of front end loaders. ▪ Low low grade material from the new Jig Plant will be conveyed by means of earth moving equipment to positions				

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	adjoining the existing Discard Dump within the existing footprint (i.e. waste from the new Jig Plant to return to the approved Discard Dump footprint). No new stockpiles will be constructed outside of the demarcated Discard Dump or other Type 3 Stockpile footprints, these will however be demarcated as part of the EMPr and WUL processes. The area of the Low low Grade Dump (stockpile) (115m²). o Jig Plant Conveyors: ▪ Approximately 25m conveyor from existing plant conveyor system to feed Jig Plant to transport arising low grade material and discard (not considered dangerous goods); ▪ Approx. 330m conveyer to feed the new Jig Plant from Discard Dump feed bin. ▪ This excludes in plant conveyors). o New Jig Plant Roads interlinked: ▪ Road 1: 240m with a width of 30m. ▪ New Jig Plant Road 2: 700m with a width of 30m. ▪ Road 3: 280m with a width of 30m. ▪ Road 4: 135m with a width of about 30m ▪ Decommissioning of existing haul road: approximately 1000m in length and 30m wide.				

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	▪ (this excludes roads to be constructed on the Plant terraces). o Overhead Powerline: 22kV powerline of approx. 620m. o Rerouting of underground electrical cable: 22kV of approx. 380m. Power supply will comprise of 22kV powerlines. Electricity will be sourced from the existing Beeshoek Substation. Minor upgrades will be undertaken within the footprint area of this substation and the feeding Eskom Substation, but no listed activities will be triggered in this regard. - Clearance (potentially 5.6ha), note that the clearance associated with the road does not contribute to the listing activity for clearance.: o Road 1 – potential clearance of 0.1ha (considered disturbed area). o WHIMS Laydown Area: approximately 1.5ha. o WHIMS Plant footprint, including access road of 160m: approximately 4ha. o WHIMS Plant Central Process Water Dam: 0.4ha, capacity less than 50 000m³.				
Project 6: Water Management	The mine will also establish additional water storage tanks on site which will include: - A new additional storage tank near the existing BN Tank of 500m³. The purpose is to provide sufficient storage space for water from the approved in-pit dewatering activities; - 4x 10m³ plastic tanks at the existing clarifier, thickener area. To allow for the storage of water in the water balance system of the mine to capacitate the plant process to start up without delay;	x	**Listing Notice 2, Activity 6**: The development of facilities or infrastructure for any process or activity which requires a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent.		Yes, Section 21g for the storage tanks as listed under the project description: - BN Tank; - Plastic Tanks; - Process Water Tank; - Steel Dam; - Zinc Dam.

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	• 1 x 2000 m³ process water tank adjacent to the existing Clarifier connected with a "balancing pipe". To allow for the storage of water in the water balance system of the mine to capacitate the plant process to start up without delay; • Existing Dam: Steel Dam 250m³ with capacity to store process water and allow for the storage of top-up water; • Existing Dam: Zinc Dam: 90m³ with capacity to store input water where required.				
Ancillary infrastructure: Topsoil stockpiles	With the expansion of area, soil layers will be stripped and place on the existing topsoil stockpiles near the detrital area, this will be dependent on the outcomes of the specialist studies.		**Listing 1, Activity 27:** The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for— except for the undertaking of a linear activity.	-	

Please note that the activities provided is based on the best available information. During the EIA Reporting process, these activities may be refined.

6 PUBLIC PARTICIPATION

(Provide details of the public participation process proposed for the application as required by Regulation.)

The Public Participation Process proposed will be undertaken in terms of the 2014 NEMA EIA Regulations (as amended). The process will include, but not be limited to, the following:

- Notification of all adjacent landowners;
- Notification of all Stakeholders who registered for the project consultation process;
- Placement of one advertisement in a local or regional newspaper;
- Placement of A3 Site Notices around the site;
- Distribution of a Background Information Document (BID), providing Stakeholders with an outline of the proposed project and how they can become involve in the consultation process;
- Compilation of an Issues and Response Report; and
- Review of the draft and final Basic Assessment Report and EMP.

6.1 Details of the Public Participation process to be followed.

6.1.1 Identification of Interested and Affected Parties to be consulted

IDENTIFICATION CRITERIA	Mark with an X where applicable	
	YES	NO
Will the landowner be specifically consulted?	X	-
Will the lawful occupier on the property other than the Landowner be consulted?	X	-
Will a tribal authority or host community that may be affected be consulted?	N/A	-
Will recipients of land claims in respect of the area be consulted?	N/A	-
Will the landowners or lawful occupiers of neighbouring properties be identified?	X	-
Will the local municipality be consulted?	X	-
Will the Authority responsible for power lines within 100 metres of the area be consulted?	X	-
Will Authorities responsible for public roads or railway lines within 100 metres of the area applied for be consulted?	X	-
Will authorities responsible for any other infrastructure within 100 metres of the area applied for be consulted? (Specify)	X	-
Will the Provincial Department responsible for the environment be consulted?	X	-
Will all of the parties identified above be provided with a description of the proposed mining /prospecting operation as referred above? ***(Please take note that this project does not involve any mining or prospecting activities, but only additional listed activities within a Mining Rights Area).***	X (parties will be informed of the proposed project)	-
Will all the parties identified above be requested in writing to provide information as to how their interests (whether it be socio-economic, cultural, heritage or environmental) will be affected by the proposed mining project?	X	-
Other, Specify	South African Heritage Resources Agency (SAHRA); Ward Councillors and the Department of Environment, Forestry and Fisheries (DEFF).	

6.1.2 Details of the Engagement Process to be Followed

Steps to be taken to notify interested and affected parties (Describe the process to be undertaken to consult interested and affected parties including public meetings and one on one consultations. NB the affected parties must be specifically consulted regardless of whether or not they attended public meetings. Photographs of notice boards, and copies of advertisements and notices notifying potentially interested and affected parties of the proposed application must be attached as an Appendix to the EIA Report	**Identification of Stakeholders** The mine has a long-standing relationship with surrounding stakeholders and farmers. The existing stakeholder consultation database will be utilised as the first point of access and for the purposes of the consultation process. In addition to this, consultation will be undertaken with specifically impacted parties (such as families of people known to be buried in the northern portion of the mine). Other Interested and Affected Parties (I&APs) will include Government Departments and Organs of State, who have jurisdiction over, or who might have an interest in the proposed protecting activities (such as the Department of Water & Sanitation (DWS)), adjacent and other landowners, Non-Governmental Organisations (NGOs) and other organisations (such as the Wildlife and Environment Society of South Africa (WESSA) and/or private persons. Adjacent and non-adjacent landowners will be identified through the review of property databases and deed searches, natural person(s) contact databases, and expanded through queries and recommendations made by identified stakeholders and general internet-based searches. Newspaper advertisements will be placed in the relevant newspapers inviting comments by I&APs and calling for registration to be included in the list of stakeholders who will receive a copy of the EIA and EMP for review and comment. It is recommended that an advert be placed in a local newspaper. **Documentation for Review and Comment** Based on the notification of identified stakeholders and in response to the advertisements, stakeholders will review and comment on: (a) A Background Information Document (BID) which will provide stakeholders with an overview of the proposed activities, the objectives and details of the stakeholder consultation process; (b) An overview of the baseline socio-economic and environmental conditions report will be distributed and stakeholders will be requested to provide further information and feedback on the information contained therein; and (c) The Draft EIA Report and EMPr will be made available for review by stakeholders during the consultation process. Government Departments (Organs of State) will be provided with a copy (via email) of the Draft EIA and EMPr regardless of registration. **Public and / or key stakeholder meetings** A public meeting will be held in order to inform the stakeholder of the proposed project and obtain their input and comments. **Addressing Concerns and Issues and Response Report** Comments and concerns will be used to verify state of the environment and socio-economic conditions and to identify risk and impacts, and mitigation measures. An Issues and Response Report will be maintained and distributed to all stakeholders for review to ensure all stakeholder comments are addressed. Proof of all correspondence and notification will be provided to the Department (DMRE) as part of the EIA Report and EMPr.
Information to be provided to Interested and Affected Parties.	**Compulsory – the following is included in this Application, and will be provided in further detail in the subsequent reports:** • The site plan; • List of activities to be authorised; • Scale and extent of activities to be authorised; • Typical impacts of activities to be authorised (e.g. surface disturbance, dust, noise, drainage, impact of waste discard site on surrounding area etc.); • The duration of the activity; and • Sufficient detail of the intended operation to enable I&APs to assess what impact the activities will have on them or on the use of their land.
	Other, information will further include: • Contact details of the EAP and information on how to register as I&APs and form part of the consultation process.

Information to be required from Interested and Affected Parties.	**The following information will be required by the Stakeholders – this will be sourced in the BID, which will contain a comments and response sheet:** • Information on how I&APs consider that the proposed activities will impact on them or their socio-economic conditions. • Written responses stating the suggestions of I&APs to mitigate the anticipated impacts of each activity. • Information on current land uses and their location within the area under consideration. • Information on the location of environmental features on site to allow I&APs to make proposals as to how and to what standard the impacts on site can be remedied. I&APs are requested to provide written proposals. • Information on how to mitigate the potential impacts on the socio-economic conditions of I&APs and to allow I&APs to make proposals as to how the potential impacts on their infrastructure can be managed, avoided or remedied.
	Other, Specify: • The Stakeholders will be provided with the contact details of the EAP in order to raise any comments, concerns and/or suggestions.

7 DESCRIPTION OF THE ASSESSMENT PROCESS TO BE UNDERTAKEN

ITEM	DESCRIPTION
Environmental attributes. (Describe how the Environmental attributes associated with the development footprint will be determined.)	**Desktop Assessments:** The DEA screening tool has been utilised as per the NEMA Regulations to provide a preliminary assessment of the environmental baseline conditions associated with the project. This assessment is attached as Annexure 5. The outcomes of this assessments are: • Agricultural Theme (medium sensitivity); • Aquatic Biodiversity Theme (Low sensitivity) • Archaeological and Cultural Heritage Theme (Medium sensitivity); • Civil Aviation Theme (High sensitivity); • Palaeontology Theme (High sensitivity); • Plant Species Theme (Medium sensitivity); • Defence Theme (Low sensitivity); • Terrestrial Biodiversity Theme (Very High sensitivity) **Desktop Assessments:** All possible environmental databases will be utilised to define the environmental attributes. This will include the utilisation of the National Environmental Potential Atlas (ENPAT) data, the South African National Biodiversity Institute (SANBI) Biodiversity Database, data from the municipal Strategic Development Framework (SDF) and the Integrated Development Plan (IDP). In addition to this, and with the availability of past specialist studies for areas associated with the various proposed projects, all available specialist investigations for these areas will be consulted to discuss the nature of environmental attributes in this area, in addition to new specialist studies commissioned. **Specialist Resources:** The following specialist have been appointed for the project: • Heritage Specialist; • Ecologist; • Wetland Specialist; • Air Quality Specialist; • Visual Assessment; • Soils and Land Capability Specialist; • Hydrologist; • Hydrogeologist; • Socio-Economic Specialist; and • Stakeholder Consultation Specialist. The following specialist studies are not regarded as necessary for this project due to the proximity of the proposed project within the extent of the overall mine, as well as the location of the neighbouring mine to the project area. The mine is also more than 10km outside of the nearest formal town: • Noise impact assessment; • Radioactivity impact assessment; • Traffic impact assessment (no additional traffic is expected to be generated by the proposed project); • Geotechnical Assessment (the mine conducts ongoing dolomitic studies – the majority of the Mine Residue Deposits are expansions of existing facilities); • Climate Impact Assessment – an overall Air Quality Impact Assessment will be conducted; • Health Impact Assessment – the mine operates within the National Dust Emission Regulations; • Seismicity Assessment.
Identification of impacts and risks. (Describe the process that will be used to identify impacts and risks.)	Impacts and risks will be identified through an assessment of the Environmental Attributes as discussed above; this will further be informed by: • Specialist investigations as mentioned above; • The expertise of the EAP, who has been involved in various projects at Beeshoek Iron Ore Mine; • The input of registered Stakeholders; and • The input and comments of Government Departments, regulatory authorities and NGOs.
Consideration of alternatives. (Describe how alternatives, and in particular the alternatives to the	"Alternatives", in relation to a proposed activity, refer to different means of meeting the general purposes and requirements of the activity, which may include alternatives to – • the property on which, or location where, it is proposed to undertake the activity; • the type of activity to be undertaken; • the design or layout of the activity; • the technology to be used in the activity;

proposed site layout and possible alternative methods or technology to be applied will be determined.)

- the operational aspects of the activity; and
- the option of not implementing the activity.

The NEMA prescribes that the procedures for the investigation, assessment and communication of the potential consequences or impacts of activities on the environment must, *inter alia*, with respect to every application for environmental authorisation –

- ensure that the general objectives of Integrated Environmental Management and the National Environmental Management Principles set out in NEMA are taken into account; and
- include an investigation of the potential consequences or impacts of the alternatives to the activity on the environment and assessment of the significance of those potential consequences or impacts, including the option of not implementing the activity.

Limited alternatives are present as the proposed activities mainly occur as expansions. Technological or processing alternatives are however available for consideration with respect to the two proposed plants.

The EIA Report will therefore contain a description of any feasible and reasonable alternatives that have been identified, including a description and comparative assessment of the advantages and disadvantages that the proposed activity and alternatives will have on the environment and on the community that may be affected by the activity. The following alternatives will be considered during the EIA process:

- Scheduling and Timing of the activities (i.e. wet and dry seasons);
- No-Go Option.

Process to assess and rank impacts. (Describe the process to be undertaken to identify, assess and rank the impacts and risks each individual activity.)

The various environmental impacts and benefits of this project will be discussed in terms of impact status, extent, duration, probability, and intensity. Impact significance is regarded as the sum of the impact extent, duration, probability and intensity and a numerical rating system will be applied to evaluate impact significance; therefore an impact magnitude and significance rating is applied to rate each identified impact in terms of its overall magnitude and significance.

In order to adequately assess and evaluate the impacts and benefits associated with the project it will be necessary to develop a methodology that would scientifically achieve this and to reduce the subjectivity involved in making such evaluations. To enable informed decision-making it is necessary to assess all legal requirements and clearly defined criteria in order to accurately determine the significance of the predicted impact or benefit on the surrounding natural and social environment.

The nature or status of the impact is determined by the conditions of the environment prior to construction and operation. A discussion on the nature of the impact will include a description of what causes the effect, what will be affected and how it will be affected. The nature of the impact can be described as negative, positive or neutral.

Status of Impact

RATING	DESCRIPTION	QUANTITATIVE RATING
Positive	A benefit to the receiving environment.	**P**
Neutral	No cost or benefit to the receiving environment.	**-**
Negative	A cost to the receiving environment.	N

Impact Extent

The extent of an impact is considered as to whether impacts are either limited in extent of if it affects a wide area or group of people. Impact extent can be site specific (within the boundaries of the development area), local, regional or national and/or international.

RATING	DESCRIPTION	QUANTITATIVE RATING
Low	Site Specific; Occurs within the site boundary.	1
Medium	Local; Extends beyond the site boundary; Affects the immediate surrounding environment (i.e. up to 5 km from the Project Site boundary).	2
High	Regional; Extends far beyond the site boundary; Widespread effect (i.e. 5 km and more from the Project Site boundary).	3

Very High	National and/or international; Extends far beyond the site boundary; Widespread effect**.**	4

Impact Duration

The duration of the impact refers to the time scale of the impact or benefit.

RATING	DESCRIPTION	QUANTITATIVE RATING
Low	Short term; Quickly reversible; Less than the project lifespan; 0 – 5 years.	1
Medium	Medium term; Reversible over time; Approximate lifespan of the project; 5 – 17 years.	2
High	**Long term; Permanent; Extends beyond the decommissioning phase; >17 years.**	3

Impact Probability

The probability of the impact describes the likelihood of the impact actually occurring

RATING	DESCRIPTION	QUANTITATIVE RATING
Improbable	Possibility of the impact materialising is negligible; Chance of occurrence <10%.	1
Probable	Possibility that the impact will materialise is likely; Chance of occurrence 10 – 49.9%.	2
Highly Probable	It is expected that the impact will occur; Chance of occurrence 50 – 90%.	3
Definite	**I**mpact will occur regardless of any prevention measures; Chance of occurrence >90%.	4
Definite and Cumulative	Impact will occur regardless of any prevention measures; Chance of occurrence >90% and is likely to result in in cumulative impacts	5

Impact Intensity

The intensity of the impact is determined to quantify the magnitude of the impacts and benefits associated with the proposed project.

RATING	DESCRIPTION	QUANTITATIVE RATING
Maximum Benefit	Where natural, cultural and / or social functions or processes are positively affected resulting in the maximum possible and permanent benefit.	+ 5
Significant Benefit	Where natural, cultural and / or social functions or processes are altered to the extent that it will result in temporary but significant benefit.	+ 4
Beneficial	Where the affected environment is altered but natural, cultural and / or social functions or processes continue, albeit in a modified, beneficial way.	+ 3
Minor Benefit	Where the impact affects the environment in such a way that natural, cultural and / or social functions or processes are only marginally benefited.	+ 2
Negligible Benefit	Where the impact affects the environment in such a way that natural, cultural and / or social functions or processes are negligibly benefited.	+ 1

Neutral	Where the impact affects the environment in such a way that natural, cultural and / or social functions or processes are not affected.	0
Negligible	Where the impact affects the environment in such a way that natural, cultural and / or social functions or processes are negligibly affected	- 1
Minor	Where the impact affects the environment in such a way that natural, cultural and / or social functions or processes are only marginally affected.	- 2
Average	Where the affected environment is altered but natural, cultural and / or social functions or processes continue, albeit in a modified way.	- 3
Severe	Where natural, cultural and / or social functions or processes are altered to the extent that it will temporarily cease.	- 4
Very Severe	Where natural, cultural and / or social functions or processes are altered to the extent that it will permanently cease.	- 5

Impact Significance

The impact magnitude and significance rating is utilised to rate each identified impact in terms of its overall magnitude and significance.

IMPACT	RATING	DESCRIPTION	QUANTITATIVE RATING
Positive	High	Of the highest positive order possible within the bounds of impacts that could occur.	+ 12 – 16
	Medium	Impact is real, but not substantial in relation to other impacts that might take effect within the bounds of those that could occur. Other means of achieving this benefit are approximately equal in time, cost and effort.	+ 6 – 11
	Low	Impacts is of a low order and therefore likely to have a limited effect. Alternative means of achieving this benefit are likely to be easier, cheaper, more effective and less time-consuming.	+ 1 – 5
No Impact	No Impact	Zero impact.	0
Negative	Low	Impact is of a low order and therefore likely to have little real effect. In the case of adverse impacts, mitigation is either easily achieved or little will be required, or both. Social, cultural, and economic activities of communities can continue unchanged.	- 1 – 5
	Medium	Impact is real, but not substantial in relation to other impacts that might take effect within the bounds of those that could occur. In the case of adverse impacts, mitigation is both feasible and fairly possible. Social cultural and economic activities of communities are changed but can be continued (albeit in a different form). Modification of the project design or alternative action may be required.	- 6 – 11
	High	Of the highest order possible within the bounds of impacts that could occur. In the case of adverse impacts, there is no possible mitigation that could offset the impact, or	- 12 - 16

	<table><tr><td></td><td></td><td>mitigation is difficult, expensive, time-consuming or a combination of these. Social, cultural and economic activities of communities are disrupted to such an extent that these come to a halt.</td><td></td></tr></table> The impacts for each individual phase of the project, namely the construction, operational and decommissioning / closure phases will be rated for with and without management measures.
Contribution of specialist reports (Describe how specialist reports, if required, will be taken into consideration and inform the impact identification, assessment and remediation process.)	**Specialist Resources:** The following specialist have been appointed: - Heritage Specialist; - Ecologist; - Wetland Specialist; - Air Quality Specialist; - Visual Assessment; - Soils and Land Capability Specialist; - Hydrologist; - Hydrogeologist; - Socio-Economic Specialist; and - Stakeholder Consultation Specialist.
Determination of impact management objectives and outcomes. **(Describe how impact management objectives will be determined for each activity to address the potential impact at source, and how the impact management outcomes will be aligned with standards.)**	Please refer to the earlier sections in which the detailed methodology for the assessment of impacts is described in detail. The impact ratings will be undertaken for each activity within the subsequent phases of the EIA Process. The EMP will be developed on the basis that the activities and the subsequent rehabilitated areas are safe, stable, non-polluting and are able to support a self-sustaining ecosystem similar to surrounding natural environment. The current approved Environmental Authorisations and approved EMPs will be consulted to ensure that these legal requirements also form part of the conditions of this project where relevant. <u>Management Objectives Determination and Outcome:</u> All projects go through several stages during their life cycle. In each of these stages environmental management must be practiced to maintain sustainable development and to protect the environment. The stages are: Planning stage; Construction stage; Operational stage; and Decommissioning. *Planning stage:* During the planning stage environmental concerns should and must be taken into consideration. Ideally, possible adverse effects on the environment during construction and decommission stages and on how to mitigate these impacts should be identified. *Construction stage:* The EMP for the construction stage is aimed at providing environmental guidance for the implementation and construction phase of a project. During this phase, more damage to the natural environment can often be caused than during normal operations. This phase should be therefore be managed with even more care than the remainder of the project stages. An Environmental Control Officer (ECO), for example, should be responsible for ensuring that the conditions in the Environmental Authorisation are adhered to and that the EMPr is executed with due care. The EMP is intended to enable the management and mitigation of construction activities in order to avoid or reduce negative environmental impacts. These impacts range from those incurred during start-up to the construction activities. The EMP typically contains the following: • The specific activity or potential impact that requires management; • The mitigation measures to be implemented; • The performance indicators; • Who would be responsible for implementation; and • Who would be responsible for monitoring? *Operational Stage* The EMP provides specific guidance related to the operational activities associated with a particular development. The roles and responsibilities for mitigation, monitoring and performance assessment for the operational life of the development are specified in the EMP. *Decommissioning Stage* The decommissioning phase is the final phase of the operation. Decommissioning may present positive environmental opportunities associated with the return of land for alternative use and the cessation of impacts

	associated with operational activities. Depending on the nature of the operational activity, the need to manage risks and potential residual impacts will remain well after operations have ceased. The decommissioning phase EMP provides specific guidance with respect to the possible management of the environmental risks associated with the decommissioning stage of a project. Land rehabilitation forms part of this phase of the activities. It is especially relevant to an industry such as that of the applicant, namely mining. It is ideal to use an Environmental Management System (EMS), which is a system that is part of an organisation's overall management system, including the organisational structure, practices, processes, resources and responsibilities, for implementing environmental management. It provides a comprehensive set of tools for achieving environmental objectives and targets, and operates as a continual and iterative cycle of planning, implementing, reviewing and improving. An EMS promotes environmental awareness, commitment and ownership throughout the project life cycle. Its framework is similar to the management frameworks of a number of general business processes including financial, human resource, quality control, and health and safety. The EMS is a system of continual improvement that must adapt to operational and environmental changes.

8 OTHER AUTHORISATIONS REQUIRED

It should be noted that the provided information in this section is based on the best information available to the EAP at the time of this application. This will be refined during the EMP phases.

LEGISLATION	Mark with an X where applicable			
	AUTHORISATION REQUIRED		APPLICATION SUBMITTED	
	YES	NO	YES	NO
SEMAs				
National Environmental Management: Air Quality Act		**X**		**x**
National Environmental Management: Biodiversity Act	**X (depending on specialist study)**			**x**
National Environmental Management: Integrated Coastal Management Act		**x**		**x**
National Environmental Management: Protected Areas Act		**x**		**x**
National Environmental Management: Waste Act	**x**			**x**
National legislation				
Mineral Petroleum Development Resources Act		**x**		**x**
National Water Act	**x**			**x**
National Heritage Resources Act	**x**			**x**
Others: Please specify	Tree removal permits will likely be required.			

Please provide proof of submission of applications in **Annexure 7**.

In the event that an authorization in terms of the National Environmental Waste Management Act is required for any of the activities applied for please state so clearly in order for such an authorisation to be considered as part of this application.

9 DRAFT EMPR

For consultation purposes, provide a high level approach to the management of the potential environmental impacts of each of the activities applied for.

ACTIVITIES	PHASE	SIZE AND SCALE (of Disturbance)	TYPICAL MITIGATION MEASURES	COMPLIANCE WITH STANDARDS
• Planning and Design	Planning Phase	-	• The necessary NEMA, NEM:WA, National Environmental Management: Air Quality Act, 2004 (NEM:AQA) and National Water Act, 1998 (NWA) licences should be obtained prior to the initiation of construction activities. • The necessary tree removal permits should be obtained prior to clearance activities where required. • Where grave relocation is required the necessary discussions and permits should be obtained.	The implementation of the management measures will give effect to the NEMA duty of care principle. It will further ensure that activities are undertaken in an environmentally sound manner with the least amount of environmental and social disturbance
• Clearance of an area	Construction Phase	Approximately 952ha, which mainly relates to the new opencast footprints and increases in WRD footprints.	• Where sensitive pan areas are identified these should either be demarcated or clearly indicated on drawings to avoid disturbance where not applied for. • Haul road construction should be located as close as possible to the mining infrastructure which it serves and should as far as practically possible follow natural contours. • Where possible existing roads should be utilised. • Clearing of vegetation should be restricted to the designated project area. • Designated project areas should be demarcated. • Induction should be provided to all staff and contractors on the presence of sensitive or protected species and the management of these. • Use measures to minimise dust generation. • Topsoils should be stripped in accordance with the approved EMPs. • Topsoil should be stockpiled in designated areas. • Topsoil stockpiles should be managed in accordance with a Topsoil Management Plan. • Erosion control measures should be in place. • 500m buffer around any identified water resource (pans) as identified during the specialist studies must be maintained, including dry pans. Where this is not possible the required WULs should be applied for. • Storm water management systems should be developed in consultation with the hydrologist. • An alien plant species and weed control programme will be implemented throughout the life of the mine. This programme will be implemented in accordance with the	The implementation of the management measures will give effect to the NEMA duty of care principle. It will further ensure that activities are undertaken in an environmentally sound manner with the least amount of environmental and social disturbance

ACTIVITIES	PHASE	SIZE AND SCALE (of Disturbance)	TYPICAL MITIGATION MEASURES	COMPLIANCE WITH STANDARDS
			requirements of the National Environmental Management: Biodiversity Act, 2004 (NEM:BA), the Conservation of Agricultural Resources Act, 1983 (CARA) and relevant Regulations. - Any spills occurring during the operation must be cleaned up immediately. - Any significant spills must be captured in the incident reports and must be reported to the relevant department (DMRE, DWS). - A clean up procedure (i.e. Works Instruction) must be in place. - Erosion control measures should be in place on all stockpiles. - Emergency preparedness plans must be put in place. - Diesel must be stored in bunded areas. - Wastes should be disposed of at designated and licensed facilities.	
- ROM Stockpiling and Discard Dump Stockpiling and Reworking	Operational Phase	ROM Stockpile approximately 35ha and Discard Dump approximately 60ha (no clearance)	- Practices should be optimised on an ongoing basis to ensure the reworking of waste from the Slimes Dam and the Discard Dump. - Dust suppression should be undertaken on conveyor transfer points were deemed necessary. - Dust monitoring should be undertaken monthly or as prescribed by the Air Quality specialist.	The implementation of the management measures will give effect to the NEMA duty of care principle. It will further ensure that activities are undertaken in an environmentally sound manner with the least amount of environmental and social disturbance
- Waste Rock Dump Operation	Operational Phase	Approximately 500ha	- The final layout of the WRDs should be demarcated on site (wooden pegs can be used). - The layout of the WRDs should be surveyed at least annually to ensure that the design perimeters are still in line with the approved areas. - The slope should be rehabilitation in terms of the approved design drawings. - Where areas have been completed in terms of deposition activities, rehabilitation should be implemented in a phased approach. - Rehabilitation trials are recommended to ensure that the rehabilitation measures as stipulated in the EMP are successful (i.e. topsoil/gravel mixture vs. only gravel vs. only topsoil and vegetation vs. self-succession, etc.). - Dust suppression should be implemented if required. - A Code of Practice for the operation of WRDs should be formulated and implemented on site. - Groundwater monitoring should be undertaken as per the WUL. - Waste Classification should be undertaken every 5 years, or as required in the NEM:WA. - Dust monitoring should be undertaken monthly or as prescribed by the Air Quality specialist.	
- Opencast Operations	Operational Phase	Approximately 1 074ha	- The required dewatering activities should be undertaken to ensure safe mining conditions.	

ACTIVITIES	PHASE	SIZE AND SCALE (of Disturbance)	TYPICAL MITIGATION MEASURES	COMPLIANCE WITH STANDARDS
			• Flow meters should be implemented on the pipelines from dewatering activities to dams. • Dams should be equipped with flow and level meters. • A Water Balance should be well maintained. • Blasting should be undertaken by suitably qualified persons. • Vibration monitoring should be undertaken at strategic areas around the mine. • Blasting should only be undertaken during the day. • Blasting times should be made known to surrounding landowners well in advance. • Dust monitoring should be undertaken monthly or as prescribed by the Air Quality specialist. • Groundwater monitoring should be undertaken in terms of water levels as well as water quality as prescribed in the WUL. • A Numerical Model should be updated regularly, specifically to determine any impact of dewatering on surrounding landowners, as well as pollution plumes. These timeframes will be stipulated during the specialist investigations. • Ongoing water forum meetings should be maintained to ensure that an open channel of communication is maintained with stakeholders.	
• Plant Operation	Operational Phase	Approximately 10ha	• Any spills occurring during the operation must be cleaned up immediately. • Contaminated water should be contained in bunded areas around the plants. • Any significant spills must be captured in the incident reports and must be reported to the relevant department (DMRE, DWS). • A clean up procedure (i.e. Works Instruction) must be in place. • Emergency preparedness plans must be put in place. • Storm Water Management Systems should be maintained. • Flow meters should be implemented on the pipelines from dewatering activities to dams. • Dams should be equipped with flow and level meters. • A Water Balance should be well maintained. • A closed water circuit should be maintained and optimised. • Dust suppression should be undertaken on conveyor transfer points were deemed necessary. • Dust monitoring should be undertaken monthly or as prescribed by the Air Quality specialist. • Where heritage resources have been identified these must be clearly demarcated. • Power lines should be restricted to the mining area. •	

ACTIVITIES	PHASE	SIZE AND SCALE (of Disturbance)	TYPICAL MITIGATION MEASURES	COMPLIANCE WITH STANDARDS
Operation of Haul Roads	Operational Phase	Approximately 24ha (excluding plant roads)	Haul roads should be clearly demarcated. Safety berms should be implemented to manage traffic. Erosion control measures should be implemented. Clearly indicated traffic signs should be implemented indicating traffic direction, speed limits, as well as the potential presence of game in the area. Dust suppression should be undertaken on conveyor transfer points were deemed necessary. Dust monitoring should be undertaken monthly or as prescribed by the Air Quality specialist.	
Process Water Dam	Operational Phase.	Process Water Dam: 0.4ha, capacity of 5 000m^3	The dam must be lined with a Type 3, Class C liner or be concreted to allow for cleaning – a silt trap must also be implemented should this be identified to maintain the capacity during the design phase. Flow meters should be implemented on the pipelines from dewatering activities to dams. Dams should be equipped with flow and level meters. A Water Balance should be well maintained. A closed water circuit should be maintained and optimised.	The implementation of the management measures will give effect to the NEMA duty of care principle. It will further ensure that activities are undertaken in an environmentally sound manner with the least amount of environmental and social disturbance.
Rehabilitation of Activities	Decommissioning and Closure	-	A legal assessment of all activities must be undertaken annually to ensure that all are licensed. A detailed Closure Plan must be developed and submitted to the relevant departments for approval. Draw up a plan clearly defining the area where the removal of infrastructure should take place. Implement the plan with sufficient measures in place not to compact new areas. Any hydrocarbon, effluent or other contaminants should be collected and the soils remediated immediately. All legally appointed personnel responsible or involved in activities on site must receive training on the requirements of the Environmental Authorisations and EMPs. Monitoring of decommissioning activities must be undertaken, on the lawful implementation of the Environmental Authorisation. Environmental Authorisations and all related permits must be available on site at all times. All fixed assets that can be profitably removed will be removed for salvage or resale (the salvage and resale value have however not been incorporated into the closure cost estimate as per the legislative requirements).	The implementation of the management measures will give effect to the NEMA duty of care principle. It will further ensure that activities are undertaken in an environmentally sound manner with the least amount of environmental and social disturbance

ACTIVITIES	PHASE	SIZE AND SCALE (of Disturbance)	TYPICAL MITIGATION MEASURES	COMPLIANCE WITH STANDARDS
			• Infrastructure should be removed and disposed of at suitably licensed facilities. • Safety berms should be constructed around opencast pits, where these cannot be backfilled. • All surface structures, infrastructure and 'hard surfaces' (*inter alia*, redundant surfaced roads, parking and paved areas) are to be demolished and removed from the disturbed mine footprint, unless an alternative/ continued use for any such items is agreed upon, in writing, with the DMRE. • All roads should be rehabilitated once the activities in that area has been completed and the roads are no longer required. • Compacted soils adjacent to the activities and associated infrastructure footprint can be lightly ripped to alleviate compaction to allow for self-succession. • All rehabilitated areas should be effectively fenced off or clearly demarcated to avoid access thereto by unauthorised parties up until full rehabilitation has been achieved. • No open fires must be allowed. • All fences erected around the infrastructure be dismantled and either disposed of at a permitted disposal site or sold off as scrap (provided that these structures will no longer be required by the post-mining land owner). Fences erected to cordon off dangerous excavations will remain in place and will be maintained as and when required. • All boreholes must be sealed upon completion to prevent ingress of water from surface. • Any completed borehole that is not required for groundwater monitoring, must be sealed and rehabilitated to prevent groundwater contamination. • Water pollution control structures will remain until the completion of all demolition and associated rehabilitation activities where after these will be rehabilitated. • Groundwater monitoring should be maintained for at least 5 years after closure.	

10 CLOSURE PLAN

Baseline environment Describe how the baseline environment will be determined with the input of interested and affected parties and due cognizance of the current land uses and or existing biophysical environment	**Desktop Assessments:** All possible environmental databases will be utilised to define the environmental attributes. This will include the utilisation of the National ENPAT data, SANBI Biodiversity Database, and data from the municipal SDP and the IDP. **Existing Closure Commitments:** The Mine has an approved EMP. Already approved closure measures will be implemented for the Discard Facility, stockpile area and associated infrastructure, in addition to those stipulated in the new Environmental Authorisation. **Specialist Resources:** The following specialists have been appointed: • Heritage Specialist; • Ecologist; • Wetland Specialist; • Air Quality Specialist; • Visual Assessment; • Soils and Land Capability Specialist; • Hydrologist; • Hydrogeologist; • Socio-Economic Specialist; and • Stakeholder Consultation Specialist. **Stakeholders:** A detailed stakeholder consultation process in line with the NEMA requirements will be undertaken. Stakeholders will be presented with the opportunity to review the draft and final environmental reports. The comments received will be incorporated in the design of the management measures.
Closure objectives Describe the closure objectives and the extent to which they will be aligned to the baseline environment	The rehabilitation plan will be developed on the bases that the rehabilitated areas are safe, stable, non-polluting and are able to support a self-sustaining ecosystem similar to surrounding natural environment. To ensure that the rehabilitation plan is aligned with the closure objective, a high-level risk assessment of the components will be undertaken to establish the potential risks associated therewith. The closure objectives will be to: • Ensure that the plan is in line with already approved measures as presented in the approved WUL and EMP; • Remove all infrastructure; where this cannot be reused by subsequent landowners; • Remove all remaining product stockpiles; • Reuse waste rock in the backfilling and closure of opencast pits where possible; • Remove and/or rehabilitate all pollution and pollution sources such as waste materials and spills; • To establish rehabilitated areas which are not subject to soil erosion which may result in the loss of soil, degradation of the environment and cause pollution of surface water resources; and • Restore disturbed areas and re-vegetate these areas with grass species naturally occurring in the area, where self succession did not take place, to restore the ecological function of such areas as far as is practicable.
Rehabilitation Cost Describe how the rehabilitation cost will be determined and provide a preliminary estimate thereof	The Mine annually assesses its closure calculation. Based on the final design of the infrastructure and the alternative assessment the closure cost will be determined. The cost will include: • Enviroberms around the opencast pits; • Profiling of the WRDs; • Removing of plant infrastructure; and • Ripping of roads. The following is an estimation based on current information and will be assessed during the EIA phase:

Infrastructure	Unit	Quantity	Rate	Total
Dismantle steel structure high with heavy internal steel	m^2	4465,00	R 375,29	R 1 675 670,11
Dismantle low to medium height steel buildings/structures to salvage yard	m^2	8730,00	R 165,44	R 1 444 291,20
Demolishion of haul roads, rip and shape	m^2	187500,00	R 3,75	R 703 125,00
BN Pit EnviroBerm (addition to what is already included)	m	1600,00	R 330,26	R 528 416,00
HF Pit EnviroBerm	m	2400,00	R 330,26	R 792 624,00
Village Pit A EnviroBerm	m	1800,00	R 330,26	R 594 468,00
Village Pit B EnviroBerm	m	840,00	R 330,26	R 277 418,40
BF Pit EnviroBerm (addition to what is already included)	m	550,00	R 330,26	R 181 643,00
HF WRD (profiling)	m^2	200000,00	R 15,91	R 3 182 000,00
Remainder WRDs included into existing closure cost.				R 0,00
Rip and Shape (ROM)	m^2	370000,00	R 3,75	R 1 387 500,00
Total				**R 10 767 155,71**
Management and Administration				
Preliminary & General (6%)				R 646 029,34
Contingency (10%)				R 1 076 715,57
			Total (ZAR)	**R 12 489 900,63**

Decommissioning
Considering that rehabilitation must take place upon cessation of an activity, describe when each of activities applied for will be rehabilitated in terms of either the cessation of the individual activity or the cessation of the overall prospecting or mining activity.

All activities will be rehabilitation upon decommissioning of the mining activities. Earlier rehabilitation could commence on WRDs and in Opencast Pits as these reaches its individual end of life, but these may remain dormant at that time to allow for further mining or use dependent on market conditions.

General management measures will include:

- A legal assessment of all activities must be undertaken annually to ensure that all are licensed.
- A detailed Closure Plan must be developed and submitted to the relevant departments for approval.
- A plan clearly defining the areas where the removal of infrastructure should take place, to be implemented with sufficient measures in place not to compact new areas.
- Any hydrocarbon, effluent or other contaminants should be collected and the soils remediated immediately.
- All legally appointed personnel responsible or involved in activities on site must receive training on the requirements of the Environmental Authorisations and EMPs.
- Quarterly monitoring of decommissioning activities must be undertaken, on the lawful implementation of the Environmental Authorisation.
- Environmental Authorisations and all related permits must be available on site at all times.
- All fixed assets that can be profitably removed will be removed for salvage or resale (the salvage and resale value have however not been incorporated into the closure cost estimate as per the legislative requirements).
- Infrastructure should be removed and disposed of at suitably licenced facilities.
- Safety berms should be constructed around opencast pits, where these cannot be backfilled.
- All surface structures, infrastructure and 'hard surfaces' (*inter alia*, redundant surfaced roads, parking and paved areas) are to be demolished and removed from the disturbed mine footprint, unless an alternative/ continued use for any such items is agreed upon, in writing, with the DMRE.
- All roads should be rehabilitated once the activities in that area has been completed and the roads are no longer required.
- Compacted soils adjacent to the activities and associated infrastructure footprint can be lightly ripped to alleviate compaction to allow for self-succession and revegetate where self-succession is not successful.
- All rehabilitated areas should be effectively fenced off or clearly demarcated to avoid access thereto by unauthorised parties up until full rehabilitation has been achieved.
- No open fires must be allowed.
- All fences erected around the infrastructure be dismantled and either disposed of at a permitted disposal site or sold off as scrap (provided that these structures will no longer be required by the post-mining land owner). Fences erected to cordon off dangerous excavations will remain in place and will be maintained as and when required.
- All boreholes must be sealed upon completion to prevent ingress of water from surface.
- Any completed borehole that is not required for groundwater monitoring, must be sealed and rehabilitated to prevent groundwater contamination.
- Water pollution control structures will remain until the completion of all demolition and associated rehabilitation activities where after these will be rehabilitated.

Groundwater monitoring should be maintained for at least 5 years after closure.

11 PROOF OF APPLICATION FEE

Anneuxre 6 provides the proof of payment of the Application Fee for an EIA Process.

12 SIGNATURE BY APPLICANT

Signature of the applicant / Signature on behalf of the applicant:

ASSMANG (PTY) Ltd. Beeshoek Mine

Name of company (if applicable):

Date: 10/02/2021

13 DECLARATION OF THE EAP

I, Tanja Bekker, declare that –

General declaration:

- 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 declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I will take into account, to the extent possible, the matters listed in regulation 8 of the Regulations when preparing the application and any report relating to the application;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- I will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;
- I will keep a register of all interested and affected parties that participated in a public participation process; and
- I will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not
- all the particulars furnished by me in this form are true and correct;
- will perform all other obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I realise that a false declaration is an offence in terms of regulation 71 of the Regulations and is punishable in terms of section 24F of the Act.

Disclosure of Vested Interest (delete whichever is not applicable)

- 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;

- ~~I have a vested interest in the proposed activity proceeding, such vested interest being:~~

_N/A_

Signature of the environmental assessment practitioner:

Envirogistics Pty Ltd
Name of company:

09/02/2021
Date:

9 Feb 21

CORNE VAN DEN HEEVER
Chartered Accountant (SA)
Commissioner of Oaths (RSA)
426 / 428 Ontdekkers Road
Florida Park 1709
Tel: +27 (0)11 672 8700

APPENDICES

Appendix 1: EAP Experience

Curriculum vitae: Ms Tanja Bekker

Name	:	Bekker, Tanja
Date of Birth	:	23 June 1980
Profession/Specialisation	:	Environmental Project Manager / Cert. Environmental Assessment Practitioner
Nationality	:	South African
Years' Experience	:	18 Years

Key qualifications

Ms Tanja Bekker has more than 18 years' working experience in the Environmental Consultancy Industry. Her key focus is environmental management and compliance with extensive experience in the mining industry. Project Management and Coordination form a critical component of her duties, which include environmental gap analysis, project planning, initiation of projects, client, authority and stakeholder consultation, specialist coordination, budget control, process control, quality control and timeframe management.

Her interest lies in a client advisory capacity, being involved during due diligence investigations, pre-project development and assisting the client and engineering team in adding value to develop a project in and environmental sustainable manner, considering client costs and liabilities, as well as the implication of environmental regulatory requirements and conditions on project deliverables.

Her involvement in projects has spanned over the project life cycle from Due Diligence Investigations, Pre-Feasibility Investigation's, Prospecting Right Applications, Mining Right Applications, Environmental Impact Assessments, Environmental Management Plans and implementation and auditing of Environmental Management Plans and Authorisations.

Ms Bekker has significant experience in integrated environmental management processes, such as Environmental Scoping Assessment, Environmental Impact Assessments (EIAs) and Basic Assessment Reports (BARs), and the development of Environmental Management Plans (EMP). Her experience further spans into the formulation and management of Water Use License Applications and Integrated Water and Waste Management Plans. Her experience and professional registrations have resulted in her capabilities to act as a Project Manager and Peer Reviewer for Environmental Authorisation Projects ensuring the independence of such projects, as well as Project undertaken in terms of IFC/World Bank Requirements.

She has comprehensive experience and thorough understanding of the National Environmental Act, 1998 and subsequent Regulations; National Environmental Management: Waste Act, 2008; National Environmental Management: Air Quality Act, 2004; National Water Act, 1998 and the Mineral and Petroleum Resources Development Act, 2002. She is a certified ISO 14001 Lead Auditor and has been involved in conducting environmental audits and site assessments, implementing of EMPs, as well as assessing environmental compliance. She has acted as the Large Account Manager for various mining companies including Total Coal South Africa (involved for 7 year), as well as for Assmang's Ferrous Division (involved for 12 years).

Ms. Bekker acts as a Guest Lecturer at the University of Johannesburg at the Department of Geography and Environmental Management, where she lectures 3rd and 4th year students on matters regarding Environmental Management and the implementation of knowledge into the Environmental Consulting Field.

Ms Bekker is a registered Professional Natural Scientist with the South African Council of Natural Science Professional Board and is also a Certified Environmental Assessment Practitioner with the Board of Environmental Practitioner Association of South Africa (EPASA) a legal requirement of the National Environmental Management Act, 1998.

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Employment Record

02/2015 to current:	EnviroGistics – Owner
01/2007 to 04/2014:	GCS (Pty) Ltd – Project Manager; Environmental Unit Manager
06/2006 to 12/2006:	WSP Environmental (Pty) Ltd – Environmental Scientist
09/2003 to 05/2006:	GCS (Pty) Ltd – Environmental Scientist
08/2002 to 08/2003:	Digby Wells and Associates – Junior Environmental Scientist
04/2001 to 07/2002 (Part time):	UWP Engineers – Part Time Digitizer – GIS (Arc View)

Education

B.Sc. Earth Sciences (Geography & Geology) – RAU (University of Johannesburg)
B.Sc. Geography Honours - RAU (University of Johannesburg)
M.Sc. Environmental Management - RAU (University of Johannesburg)

Career Enhancing Courses

ISO 14000 Lead Auditors Course (WTH Management)
Certificate in Project Management (Pretoria University)
Management Advance Programme (MAP 81) (Wits Business School)
Certificate in Customer Service Excellence (Pretoria University Enterprises)
IWRM, the NWA and Water Use Authorisations (Carin Bosman Sustainable Solutions)

Professional Affiliations

Registered Environmental Assessment Practitioner of South Africa (EAPSA)
Certified ISO 14001 Environmental Management System Auditor
Registered as a Professional Natural Scientist (SACNASP),
Member of the South African affiliate of the International Association for Impact Assessment
Member of the Environmental Law Association of South Africa (ELA).

Languages

	Reading	**Writing**	**Speaking**
English	Excellent	Excellent	Excellent
Afrikaans	Excellent	Excellent	Excellent

Experience Record

1. **National Water Act, 1998**

- Water Use License Application in terms of the National Water Act, 1998 – Compilation of the Water Use License Application for Eden Districts Municipality (2004)
- Senior Review of the Total Coal South Africa, DCM East Water Use License Application (2011)
- Assmang Ltd, Khumani Iron Ore Mine, Senior Project Manager in the application for a holistic Water Use License for the Khumani Iron Ore Mine (2012)
- Assmang Ltd, Beeshoek Iron Ore Mine, Senior Project Management in the application for a holistic Water Use License for the Beeshoek Iron Ore Mine (2013)
- Assmang Ltd, Khumani Iron Ore Mine, Senior Project Manager in the amendment of approved Water Use License with the inclusion of strategic water uses to streamline the application process (2013)
- Senior Consultant in the addressing the appeal of the Total Coal South Africa, DCM East Water Use License Application (2013)
- Water Use License Application for Dwarsrivier Chrome Mine (2016);
- Water Use License Application for Beeshoek Iron Ore Mine (2018);
- Water Use License Application for NWK Liquid Fertiliser (2018);
- Water Use Licence Application for emergency water abstraction for Khumani Iron Ore Mine (2016-current).
- Formulation of Integrated Water and Waste Management Plan for Beeshoek Iron Ore Mine (2016)
- Formulation of Integrated Water and Waste Management Plan for Dwarsrivier Chrome Mine (2016)

- Management of Risk Assessment for a General Authorisation of River Crossings in the Steelpoort area (2017)
- Water Use License Application for Dwarsrivier Chrome Mine (2018 – current)
- Water Use License Application Amendment for DCM Mine, Burgersfort (2018 – current)
- Water Use License Application Amendment for Samancor, TAS Smelter (2018 – current)
- Water Use License Application Amendment for Dwarsrivier Chrome Mine (2019 – current)
- Water Use License Application Amendment for Khumani Iron Ore Mine (2019 – current)
- Integrated Water and Waste Management Plan for Dwarsrivier Chrome Mine (2016)
- Integrated Water and Waste Management Plan for Dwarsrivier Chrome Mine (2017)
- Integrated Water and Waste Management Plan for Beeshoek Iron Ore Mine (2016)
- Integrated Water and Waste Management Plan for Beeshoek Iron Ore Mine (2017)
- Integrated Water and Waste Management Plan for Wonderkop Smelter (2017)
- Integrated Water and Waste Management Plan for DRD Ergo Mine (2018-current)
- Integrated Water and Waste Management Plan for Khumani Iron Ore Mine (2018-current)

2. Mineral and Petroleum Resources Development Act, 2002

- Prospecting Right Application and Environmental Management Plan – Project manager and coordination of the environmental authorisation process on the farm McCarthy for Assmang Ltd for the prospecting of iron ore in the Northern Cape Province. Responsibilities included the overall management of the project with the compilation of the application and subsequent Environmental Management Plan (2004)
- Prospecting Right Application and Environmental Management Plan – Project manager and coordination of the environmental authorisation process on the farm Doornfontein for Assmang Ltd for the prospecting of iron ore in the Northern Cape Province. Responsibilities included the overall management of the project with the compilation of the application and subsequent Environmental Management Plan (2004)
- Prospecting Right Application – Main responsibility involved the compilation and submission of a Prospecting Right Application and associated Environmental Management Plan for Rovic (Pty) Ltd on the farm Rietkuil (2005)
- Prospecting Right Application – Main responsibility involved the compilation and submission of a Prospecting Right Application and associated Environmental Management Plan for Rovic (Pty) Ltd on the farms Ou Damplaats, Mineside, Redhills, Woolcott and Prospect (2005)
- Prospecting Right Application – Project manager for the environmental authorisation process for a Prospecting Right Application for Khusela Womens Investments (Pty) Ltd on the farm Loopspruit in the Mpumalanga Province. Main responsibility involved the coordination of the public participation process and associated Environmental Management Plan (2005)
- Prospecting Right Application – Project manager for the environmental authorisation process for a Prospecting Right Application for Khusela Womens Investments (Pty) Ltd on the farm Van Kolderskop in the Mpumalanga Province. Main responsibility involved the coordination of the public participation process and associated Environmental Management Plan (2005)
- Mining Right Application, Environmental Authorisation and Rehabilitation Fund - Project manager and co-ordination of the environmental authorisation process for the green fields Khumani Iron Ore Mine for Assmang Ltd. Main responsibilities involved the application for the Mining Right Application and subsequent liaison with the relevant authorities; coordination and management of sub consultants; liaison with the relevant stakeholders, which included the consultation in terms of purchasing of land and utilisation of bulk services; coordination and management of the public participation process; overview of the Water Use License Application; Environmental Feasibility Reporting; Site Selection process for the location of a paste disposal facility; Scoping Reporting, interpreting of specialist investigations and results and Environmental Impact Assessment and Management Reporting and the compilation of the rehabilitation fund (2006)
- Environmental Programme Addendum – Project manager and coordination of the addendum of the Harmony Randfontein Operation's approved Environmental Management Programme to alight the report with the requirements of the Mineral and Petroleum Resources Development Act, 2002, as well as the undertaking of the relevant public participation process
- Environmental Programme Addendum – Project manager and coordination of the addendum of the Harmony Randfontein Operation's approved Environmental Management Programme to align the report with the requirements of the Mineral and Petroleum Resources Development Act, 2002, as well as the undertaking of the relevant public participation process (2006)

- Environmental Programme Amendment - Project manager and coordination of the Merensky Environmental Management Programme Amendment for Anglo Platinum in Amandelbult. Main responsibilities involved the coordination of sub consultants, interpreting of specialist investigations and results, quality control, coordination of the public participation process and client liaison (2006)
- Environmental Programme Amendment - Project manager and coordination of the UG2 Environmental Management Programme Amendment for Anglo Platinum in Amandelbult. Main responsibilities involved the coordination of sub consultants, interpreting of specialist investigations and results, quality control, coordination of the public participation process and client liaison (2006)
- Environmental Programme Amendment - Project manager and coordination of the Khumani Iron Ore Mine Amendment for the inclusion of the mining of the barrier pillar between the mine and Sishen Iron Ore Mine for Assmang Limited. Main responsibilities involved the coordination and management of the project, interpreting of specialist investigations and results, quality control, coordination of the public participation process and client liaison, as well as the formulation of the financial closure cost (2007)
- Mining Right Application and Environmental Management Programme - Project manager and coordination for a mega tailings dam extension for Mine Waste Solutions, First Uranium South Africa in the Northwest Province. Main responsibilities involved the coordination and management of the project, quality control, coordination of the public participation process and client liaison, as well as the formulation of the financial closure cost (2007)
- Environmental Management Programme - Project manager and coordination of the green fields East Mine Expansion Project for Total Coal South Africa for the establishment of new opencast and underground operations with the associated plant and ancillary infrastructure, including a railway line link to the Richard Bay Coal Terminal. Main responsibilities involved the coordination and management of the project, compilation of the environmental feasibility report, interpreting of specialist investigations and results, site selection for a co-disposal facility and new railway line, quality control, coordination of the public participation process and client liaison, as well as the formulation of the financial closure cost (2008)
- Environmental Programme Amendment – Project manager and coordination of the amendment of the Harmony Kalgold Operation's approved Environmental Management Programme to align the report with the requirements of the Mineral and Petroleum Resources Development Act, 2002. Main responsibilities involved the coordination and management of the project, quality control, coordination of the public participation process and client liaison, as well as the formulation of the financial closure cost, as well as the undertaking of the relevant public participation process (2008)
- Environmental Management Programme Amendment - Project manager and coordination of the East Mine Option 1 Project for Total Coal South Africa for the establishment of conveyor line link to the Richard Bay Coal Terminal. Main responsibilities involved the coordination and management of the project, interpreting of specialist investigations and results, quality control, and client liaison, as well as the formulation of the financial closure cost (2009)
- Environmental Management Programme Amendment - Project manager and coordination of the West Mine Project for Total Coal South Africa for the establishment of new opencast and underground operations with the associated plant and ancillary infrastructure. Main responsibilities involved the coordination and management of the project, interpreting of specialist investigations and results, quality control and client liaison (2009)
- Environmental Management Programme Amendment – Project manager and coordination of the Black Rock Manganese Mines for Assmang Ltd to align the report with the requirements of the Mineral and Petroleum Resources Development Act, 2002 and to include activities such as a new plant, water treatment facility, footprint increases, etc. Main responsibilities involved the coordination and management of the project, quality control, coordination of the public participation process and client liaison, as well as the formulation of the financial closure cost (2009)
- Total Coal Service Level Agreement – Responsible for the coordination of the environmental projects and legal requirements for the Total Coal operations (2010 to current)
- Environmental Management Programme Amendment - Project manager and coordination of the Khumani Iron Ore Amendment project (2012)
- Environmental Management Programme Amendment (Low Grade Stockpile) – Project Management and coordination for the Khumani Iron Ore Mine (2016)

- Environmental Management Programme Amendment – Project Management and coordination for Beeshoek Iron Ore Mine (2018)
- Mukulu PFS Planning Project with Hatch - Project Management and coordination (2013)
- DRA Project Planning and Client Advisory Role – Ad Hoc Appointment (2013)
- Sable Metal and Minerals, Sandbult Prospecting Right Application Environmental Management Plan (2014)
- Sable Metal and Minerals, Bierkraal Prospecting Right Application Environmental Management Plan (2014)
- Sable Metal and Minerals, Doornpoort Prospecting Right Application Environmental Management Plan (2014)
- Assore Wonderstone EMP Amendment Gap Analysis (2017);
- Assore Zeerust EMP Amendment Gap Analysis (2018);
- Assore RDCM EMP Amendment Gap Analysis (2018).

3. Closure Assessments and Financial Provision in terms of the Mineral and Petroleum Resources Development Act, 2002

- Glossam Closure Assessment - Project manager of the historic Glossam Mine operations for Assmang Ltd to obtain closure in terms of the requirements of the Mineral and Petroleum Resources Development Act, 2002 Main responsibilities involve the coordination and management of the project, quality control, client liaison, as well as the formulation of the financial closure cost (2009)
- Japiesrus Closure Assessment - Project manager of the historic Glossam Mine operations for Assmang Ltd to obtain closure in terms of the requirements of the Mineral and Petroleum Resources Development Act, 2002 Main responsibilities involve the coordination and management of the project, quality control, client liaison, as well as the formulation of the financial closure cost (2011)
- Financial Provision Assessment – Responsible for the assessment of and reporting on the financial closure cost for Assmang Ltd for the Beeshoek Iron Ore Mine, Northern Cape (2007)
- Financial Provision Assessment – Responsible for the assessment of and reporting on the financial closure cost for Simmer and Jack Ltd for the Buffelsfontein Gold Mine, Northwest Province (2007)
- Financial Provision Assessment – Responsible for the assessment of and reporting on the financial closure cost for Simmer and Jack Ltd for the Buffelsfontein Gold Mine, Northwest Province (2008)
- Financial Provision Assessment – Responsible for the assessment of and reporting on the financial closure cost for Assmang Ltd for the Beeshoek Iron Ore Mine, Northern Cape (2009)
- Financial Provision Assessment – Responsible for the assessment of and reporting on the financial closure cost for Assmang Ltd for the Khumani Iron Ore Mine, Northern Cape (2009)
- Financial Provision Assessment – Responsible for the assessment of and reporting on the financial closure cost for Assmang Ltd for the Black Rock Manganese Mine, Northern Cape (2009)
- Financial Provision Assessment – Responsible for the assessment of and reporting on the financial closure cost for Simmer and Jack Ltd for the Buffelsfontein Gold Mine, Northwest Province (2009)
- Financial Provision Assessment - Responsible for the assessment of and reporting on the financial closure cost for Total Coal South Africa for the Dorstfontein East Project, Mpumalanga (2009)
- Financial Provision Assessment - Responsible for the assessment of and reporting on the financial closure cost for Total Coal South Africa for the Forzando West Project, Mpumalanga (2011)
- Financial Provision Assessment - Responsible for the assessment of and reporting on the financial closure cost for Khumani Iron Ore Mine (2014)
- Financial Provision Assessment - Responsible for the assessment of and reporting on the financial closure cost for Sable Metals and Minerals, Bierkraal Prospecting Area (2014)
- Financial Provision Assessment - Responsible for the assessment of and reporting on the financial closure cost for Sable Metals and Minerals, Sandbult Prospecting Area (2014)
- Financial Provision Assessment - Responsible for the assessment of and reporting on the financial closure cost for Sable Metals and Minerals, Doornpoort Prospecting Area (2014)
- Financial Provision Assessment for Beeshoek Iron Ore Mine 2015;
- Financial Provision Assessment for Khumani Iron Ore Mine, 2015;
- Financial Provision Assessment for Petra Diamonds Prospecting Right, 2016;
- Financial Provision Assessment for Beeshoek Iron Ore Mine, 2016;
- Financial Provision Assessment for Khumani Iron Ore Mine, 2016;

- Financial Provision Assessment in terms of the NEMA Regulations for the ARM Ferrous Operations, Northern Cape, 2016;
- Financial Provision Assessment in terms of the NEMA Regulations for the ARM Ferrous Operations, Northern Cape, 2017;
- Sebilo Resources Closure Plan Development, 2017
- Financial Provision Assessment for Beeshoek Iron Ore Mine, 2016;
- Financial Provision Assessment for Khumani Iron Ore Mine, 2016;
- Financial Provision Assessment for Beeshoek Iron Ore Mine, 2017;
- Financial Provision Assessment for Khumani Iron Ore Mine, 2017;
- Financial Provision Assessment for Black Rock Manganese Mine, 2017
- Financial Provision Assessment for Beeshoek Iron Ore Mine, 2018;
- Financial Provision Assessment for Khumani Iron Ore Mine, 2018;
- Financial Provision Assessment for Black Rock Manganese Mine, 2018

4. Environmental Conservation Act, 1989

- Environmental Authorisation - Project manager and co-ordination of the environmental authorization process for the green fields Khumani Iron Ore Mine for Assmang Ltd to obtain approval for listed activities (2005)
- Environmental Authorisation – Compilation of the Environmental Impact Assessment Report for the Gerus-Murani Power line in Namibia for NamPower (2006)
- Environmental Authorisation – Project manager and co-ordination of the environmental authorization for Blue Horisons Investments for the Paarl eco-estate development in Lephalale, Limpopo Province. Main responsibilities involved the coordination of sub consultants, quality control, coordination of the public participation process and client liaison (2006)
- Environmental Authorisation – Project manager and co-ordination of the environmental authorization for Blue Horisons Investments for the Madulakgogo eco-estate development in Burgersford, Mpumalanga Province. Main responsibilities involved the coordination of sub consultants, quality control, coordination of the public participation process and client liaison (2006)

5. **National Environmental Management Act, 1998 and National Environment Management: Waste Act, 2008**

- Environmental Authorisation for listed activities - Project manager and coordination for a mega tailings dam extension and associated listed activities (linear, plant, areas greater than 20ha, etc.) for Mine Waste Solutions, First Uranium South Africa in the Northwest Province. Main responsibilities involved the coordination and management of the project, interpreting of specialist investigations and results, quality control, coordination of the public participation process and client liaison, as well as the formulation of the financial closure cost (2007)
- Environmental Authorisation for listed activities - Project manager and coordination of the green fields East Mine Expansion Project for Total Coal South Africa for the authorisation of listed activities that included areas greater than 20ha, railway lines, conveyors, mining within wetland and watercourse areas, etc. Main responsibilities involved the coordination and management of the project, interpreting of specialist investigations and results, site selection for a co-disposal facility and new railway line, quality control, coordination of the public participation process and client liaison, as well as the formulation of the financial closure cost (2008)
- Basic Assessment for listed activities - Project manager and coordination for Assmang Ltd for the Khumani Iron Ore Mine for the temporary storage of diesel along the railway line. Main responsibilities involved the coordination and management of the project, site selection for a co-disposal facility and new railway line, interpreting of specialist investigations and results, quality control, coordination of the public participation process and client liaison, as well as the formulation of the financial closure cost (2008)
- Basic Assessment for listed activities - Project manager and coordination for Harmony Gold Mines Limited for the Evander Operations for the closure of a domestic waste disposal site. Main responsibilities involved the coordination and management of the project, interpreting of specialist investigations and results, coordination of specialists, closure alternatives, quality control, coordination of the public participation process and client liaison (2008)

- Environmental Authorisation for listed activities - Project manager and coordination of the West Mine Expansion Project for Total Coal South Africa for the authorisation of listed activities that included areas greater than 20ha, conveyors, mining within wetland and watercourse areas, etc. Main responsibilities involved the coordination and management of the project, interpreting of specialist investigations and results, quality control, coordination of the public participation process and client liaison (2009)
- Environmental Authorisation for listed activities - Project manager and coordination of the of the East Mine Option 1 Project for Total Coal South Africa for the authorisation of listed activities that involve conveyors, activities within wetland and watercourse areas, etc. Main responsibilities involved the coordination and management of the project, interpreting of specialist investigations and results, quality control, and client liaison, as well as the formulation of the financial closure cost (2009)
- Environmental Authorisation for listed activities - Project manager and coordination of the Black Rock Manganese Mines for Assmang Ltd for the authorisation of listed activities that included diesel storage and generation etc. Main responsibilities involved the coordination and management of the project, quality control, coordination of the public participation process and client liaison (2009)
- Environmental Authorisation for listed activities - Project manager and coordination of the Black Rock Manganese Mines for Assmang Ltd for the authorisation of listed activities, which include a new Eskom power line. Main responsibilities involve the coordination and management of the project, quality control, coordination of the public participation process and client liaison (2009)
- Environmental Management Programme Amendment - Project manager and coordination of the Khumani Iron Ore Amendment project (2011)
- Risk Assessments for current Total Coal Operations
- Khumani Low Grade Stockpile Environmental Authorisation – Peer Review and Overall Advisory Capacity (2014-2015)
- Nederburg (Distell Ltd) Mixed Land Use Environmental Authorisation – Principal Environmental Practitioner (2014 -2015)
- Basic Assessment Application for the upgrade of a Storm Water Dam for Beeshoek Iron Ore Mine, 2016;
- Basic Assessment Application for a Prospecting Right Application for Barkley West, Petra Diamonds, 2015;
- Basic Assessment Application for a Prospecting Right Application for Carter Block, Petra Diamonds, 2015;
- Basic Assessment Application for a Prospecting Right Application for Farm 87&88, Petra Diamonds, 2015;
- Environmental Impact Assessment for the storage of dangerous goods for NWK Liquid Fertiliser, 2016.
- Basic Assessment Application for an upgrade to a Storm Water Dam on an Iron Ore Mine, 2016.
- Basic Assessment Application for the expansion of mining activities and infrastructure at the Khumani Iron Ore Mine, 2017-current.
- Basic Assessment Application for a Prospecting Application near Loeriesfontein, 2017.
- Environmental Gap Analysis for industrial development near Steelpoort, 2017;
- Environmental Gap Analysis and Environmental Management Programme Development for Assore Wonderstone Operations (2017);
- Environmental Gap Analysis and Environmental Management Programme Development for Assore Zeerust Operations (2017);
- Integrated Basic Assessment Application for a Waste Rock Dump Extension, Dwarsrivier Chrome Mine (2017)
- Integrated Environmental Impact Assessment for Dwarsrivier Chrome Mine for new Exploration Activities and the extension of Capital Projects (2018-current);
- Integrated Environmental Impact Assessment for Dwarsrivier Chrome Mine for a new Tailings Storage Facility (2019-current);
- Environmental Impact Assessment for Khumani Iron Ore Mine for a new Return Water Dam, Pipelines and amendments to the Water Use Licence (2018-current);
- Environmental Gap Analysis for expansion projects at Beeshoek Iron Ore Mine (2018-current).
- Environmental Impact Assessment for Assmang Chrome, Machadodorp Smelter (2019-current).

6. Crack Surveys

- Mining Related Crack Survey – Responsible for the establishment of the potential impact on surrounding farm houses for Assmang Ltd for the Khumani Iron Ore Mine with relation to blasting activities. Main responsibility was the establishment of methodology and associated consultation with relevant specialists in the field and the associated reporting (2005)
- Residential Crack Survey – Responsible for determining the current status of houses in an area earmarked for business expansion in Hyde Park For Impafa Technologies (2006)

7. Air Emission Licenses

- Khumani Iron Ore Mine, Diesel Tank Atmospheric Emission License (2014)
- Coordination of LDAR Monitoring at the Khumani Iron Ore Mine (2017)
- Assistance in NAIES Reporting for the Assmang Chrome Machadodorp Operations (2017)
- Assistance in NAIES Reporting for the Assmang Chrome Machadodorp Operations (2018)

8. Audits, Gap Analysis and Due Diligence

- Due Diligence - Formed part of the audit team to assess the environmental liabilities as part of two Phase 1 Environmental Site Assessments for both the manufacturing site, as well as the warehouse. Main responsibility was the assessment of the environmental legal compliance in terms of the national, provincial and municipal legislation (2004)
- Participated as part of the audit team. The audit involved an ISO 14000 assessment in terms of the environmental, health and safety. Main areas of responsibility were to provide guidance in terms of the environmental statues of the South African Legislation (2005)
- Expert Summary on Environmental Legal Issues - The Total vs. Tavistock Arbitration assessment involved the environmental legal assessment of the two companies in question's legal status in terms of environmental compliance with specific reference to legal administration and water management. Main responsibly was the provision of an expert summary regarding the environmental legal compliance in terms of the South African Legislation (2006)
- Environmental Audits as part of the requirements of the Environmental Conservation Act, 1989 and the Mineral and Petroleum Resources Development Act, 2002 - Responsible for the formulation of the audit protocols and feedback procedures for the implementation of the environmental management programme for the Khumani Iron Ore Mine, Northern Cape. The assessment involved six month audit programme during the start of the operational phase of the mine. As part of the assessment the responsibilities involve the provision of action plans to address areas of definite and potential non-compliance. The performance assessments were later extended into the operational phase (2007)
- Environmental, Health and Safety Audit - Participated as the lead auditor for eight mining operations within South Africa for African Rainbow Minerals. The audit addressed all aspects of environmental, safety and financial closure cost within the South African Legislation. The assessment involved the formulation of the audit protocols and audit papers (2007)
- Performance Assessment as part of the requirements of the Mineral and Petroleum Resources Development Act, 2002 - Participated as part of the audit team for Assmang Ltd, the Black Rock Manganese Mine, Northern Cape. Responsible for assessing the compliance to environmental aspects in terms of the broader South African Legislation, as well as the assessment of the financial rehabilitation fund (2007)
- Performance Assessment as part of the requirements of the Mineral and Petroleum Resources Development Act, 2002 - Participated as part of the audit team for Total Coal South Africa for the Forzando North and South Mine Operations. Main responsibility was the assessment of the financial rehabilitation fund (2008).
- Performance Assessment as part of the requirements of the Mineral and Petroleum Resources Development Act, 2002 - Annual environmental audit for Assmang Ltd, the Khumani Iron Ore Mine, Northern Cape. Responsible for assessing the compliance to environmental aspects on site (2008)
- Performance Assessment as part of the requirements of the Environmental Conservation Act, 1989 – Annual environmental audits for Assmang Ltd, the Khumani Iron Ore Mine, Northern Cape. Responsible for assessing the compliance to environmental aspects on site (2008)
- Environmental Implementation for the Assmang Khumani Iron Ore Operations (2010 and contract to 2014)

- Performance Assessments for the Total Coal South Africa Operations (2009 to current – part of Service Level Agreement)
- Mooihoek Due Diligence (2013) for RSV Enco;
- Gap Analysis in terms of IFC and World Bank Operational Policies for Greenfield Madagascar Graphite Mine (2013/2014)
- Khumani Iron Ore Mine Environmental Performance (NEMA, NEM:WA, NWA and MPRDA) Assessments (2014)
- Northam Platinum: Zondereinde Division Environmental Performance (NEMA, MPRDA and NWA) Assessments (2014)
- Northam Platinum: Zondereinde Division Environmental Performance (NEM:WA) Assessments (2014)
- Dwarsrivier Platinum Mine: Water Management Gap Analysis (2014-2016)
- Khumani Iron Ore Mine Dust Monitoring Gap Analysis (2014)
- DRA Global (2014): Molo Greenfields Mine IFC and World Bank Gap Analysis and project scope formalisation;
- GEM Diamonds Botswana: Ghaghoo Diamond Mine (2015): Waste Management Gap Analysis and Action Plan formalisation
- ASA Metals WUL Performance Assessment, 2015;
- Khumani Iron Ore Mine Environmental Performance (NEMA, NEM:WA, NWA and MPRDA) Assessments (2015);
- Beeshoek Iron Ore Mine Environmental Performance (NEMA, NEM:WA, NWA and MPRDA) Assessments (2015)
- GEM Diamonds Botswana: Ghaghoo Diamond Mine (2015): SEIA Performance Assessment;
- Petra Diamonds Prospecting Right Application Annual Performance Assessment, 2016;
- Glencore WUL Audit,2016;
- Beeshoek Iron Ore Mine Environmental Performance (NEMA, NEM:WA, NWA and MPRDA) Assessments (2016);
- Khumani Iron Ore Mine Environmental Performance (NEMA, NWA and MPRDA) Assessments (2016);
- GEM Diamonds Botswana: Ghaghoo Diamond Mine (2017): SEIA Performance Assessment;
- Beeshoek Iron Ore Mine Environmental Performance (NEMA, NWA and MPRDA) Assessments (2016);
- Dwarsrivier Chrome Mine Environmental Performance (NEMA, NWA and MPRDA) Assessments (2016);
- Sable Metals (2016) Waste Management Gap Analysis and project scope formalisation.
- Glencore Magareng, Thorncliffe and Helena Performance Assessments (NEMA, NEM:WA, NWA) (2016);
- Glencore Wonderkop Performance Assessment (NWA) (2016)
- Transvaal Gold Mining Enterprises Performance Assessment (NEMA and NWA) (2017);
- Dwarsrivier Chrome Mine Environmental Performance (NEMA, NWA and MPRDA) Assessments (2017);
- Glencore Magareng, Thorncliffe and Helena Biannual Performance Assessments (NEMA, NEM:WA, 2017);
- Pascua Lama: Argentina Environmental Gap Analysis (2017);
- Yzermyn WUL Audit, 2017;
- Beeshoek Iron Ore Mine Environmental Performance (NEMA, NEM:WA, NWA and MPRDA) Assessments (2017);
- Khumani Iron Ore Mine Environmental Performance (NEMA, NWA and MPRDA) Assessments (2017);
- Yzermyn WUL Audit, 2018.
- Beeshoek Iron Ore Mine Environmental Performance (NEMA, NEM:WA, NWA and MPRDA) Assessments (2018);
- Khumani Iron Ore Mine Environmental Performance (NEMA, NWA and MPRDA) Assessments (2018);
- Dwarsrivier Chrome Mine Environmental Performance (NEMA, NWA and MPRDA) Assessments (2018);
- Glencore Magareng, Thorncliffe and Helena Biannual Performance Assessments (NEMA, NEM:WA, 2018);
- Anglo Mototolo Mine Performance (NEMA, MPRDA, NEM:WA) Assessments (2018)

- Dwarsrivier Chrome Mine Environmental Performance (NEMA, NWA and MPRDA) Assessments (2019 –renewed);
- Anglo Mototolo Mine Performance (NEMA, MPRDA, NEM:WA) Assessments (2019 – renewed)
- Glencore Magareng, Thorncliffe and Helena Biannual Performance Assessments (NEMA, NEM:WA, 201-2021) (three year contract);
- Dwarsrivier Chrome Mine Environmental Performance (NEMA, NWA and MPRDA) Assessments (three year contract 2019-2021);
- Beeshoek Iron Ore Mine Environmental Performance (NEMA, NEM:WA, NWA and MPRDA) Assessments (2019 renewed);
- Assore Wonderstone EMP Compliance Audit (2019).

9. GN704 Applications

- Beeshoek Iron Ore Mine, 2018
- Khumani Iron Ore Mine (2018-current)

10. Guest Lecture

- University of Johannesburg: August 2015 to August 2017: Environmental Impact Assessment Practices and Principles

11. Environmental Coordination and Management

- Environmental Coordination for Assmang Chrome Machadodorp Works Operation to ensure the effective implementation of environmental compliance 2015-2017 & renewed for 2017-2018 & renewed for 2018-2019 & renewed for 2019-2020.

Appendix 2: Title Deeds

£38.3.10

ORIGINAL STAMPED.
Stamp Duty £287-17-0
Registration Fee 15/-
T.D. ~~£18.0.0~~ £1535-0-9d
Notarial Agreement = 10/-

Die grond / The land ... is hernommer en moet in die toekoms beskrywe word / has been renumbered and must in future be described as ...
Akte Kantoor, Deeds Registry, Kimberley.
17. 9. 1973
K. J. PIENAAR
Registrateur. Registrar.

Gesertifiseer 'n ware afskrif in terme van die bepalings van Regulasie 66 kragtens die Registrasie van Aktes Wet, No 47 van 1937.
Certified a true copy in terms of the provisions of Regulation 66 under the Deeds Registries Act, No 47 of 1937.
FOR INFORMATION ONLY,
SLEGS VIR INLIGTING
Registrasiekantoor
Deeds Registry
Datum/Date 27 AUG 2015
REGISTRATEUR VAN AKTES
REGISTRAR OF DEEDS

This property is not subject to the terms and conditions of Mineral lease No. 165 dd. 28/11/1925 and registered on the 28/1/1927 (in so far as reference to the Prior deed T. 20337 may be construed as making it subject thereto) by reason of merger. For full details see application filed with said Notarial Lease and cession thereof.

C. E. RICHTER
Registrar of Deeds

29-4-1955

For further endorsements see over.

DEED OF TRANSFER

(By virtue of a Power of Attorney)

245
1954

Prepared by me,

CONVEYANCER.

VIR ENDOSSEMENTE KYK BLADSY / FOR ENDORSEMENTS SEE PAGE 10 ET SEQ.

KNOW ALL MEN WHOM IT MAY CONCERN:

THAT GEORGE VICTOR BARTLETT appeared before me, Registrar of Deeds, he being duly authorised thereto by a Power of Attorney dated the 1st day of March 1954, executed at JOHANNESBURG, and granted to him by FREDERICK KNIGHT and JOHN ANDERSON in their capacity as two of the Directors of

MANGANESE CORPORATION LIMITED

(White Group)

acting therein under and by virtue of a Resolution of the Directors of the said Company passed at

Johannesburg ....

BLADSY/PAGE 12

ENDOSSEMENT OP
ENDORSEMENT ON T245/84

EIENDOM/PROPERTY Rest'ant Ged. v/o Ptn 448 Hay

Endossement kragtens artikel 31(6)9 Wet
Endorsement in terms of Section ... Act 47/37

Die binnegemelde eiendom groot
The within mentioned property measuring 175m x 10m

is kragtens
has by virtue of Art 60 Wet 54/56

onteien deur
been expropriated by Dept van Waterwese

in terme van onteieningskennisgewing Nr.
in terms of expropriation notice No. ... gedateer / dated 28/11/73

Plan(ne) in duplikaat weggeliasseer met
Plan(s) in duplicate filed with EX 542/77

12/10/77.

Aktekantoor,
Deeds Office,
Kimberley.

Registrateur van Aktes.
Registrar of Deeds.

Hierdie endossement het verval weens die registrasie van Serwituut K 65/78S

20-7-1978
Kimberley

ORSMOND

UITGEREIK VIR INLIGTING DOELEINDES
ISSUED FOR INFORMATION PURPOSES

Para 3

'n Permanente Serwituut van Waterleiding.

Gesedeer aan
Ceded to Republiek van Suid Afrika

Deur Akte van Sessie
By Deed of Cession No. K.65/78S gedateer / dated

Geregistreer hierdie
Registered this ... 19...

20-7-1978

AKTEKANTOOR,
DEEDS OFFICE,
KIMBERLEY.

D. G. ORSMOND
REGISTRATEUR.
REGISTRAR.

Para 3

Die grond
The land Hierin

is hernommer en moet in die toekoms beskryf word
has been renumbered and must in future be described

word as
as Remaining Extent of Portion 1 of the farm Beestkraal 448

Akte Kantoor
Deeds Registry,
Kimberley.

D. G. ORSMOND
Registrateur.
Registrar.

20-7-1978

BLADSY/PAGE 13

ENDOSSEMENT OP / ENDORSEMENT ON T245/54

EIENDOM/PROPERTY Plaas 446 Hay. WoP.

Para 3.

DIE GROOTTE VAN BINNEGEMELDE EIENDOM OMSKEP IN METRIEKE MATE IS
THE EXTENT OF THE WITHINMENTIONED PROPERTY CONVERTED TO METRIC MEASURES IS

1304, 6008 HEKTAAR/~~METERS~~* HECTARE(S)/~~METRES~~*

D. G. ORSMOND

20-7-1978 ~~ASST.~~ REGISTRATEUR VAN AKTES. / ~~ASST.~~ REGISTRAR OF DEEDS.

* SKRAP WAAR NODIG / DELETE WHERE NECESSARY.

Para (1) + (2)

Endossement kragtens Artikel / Endorsement by virtue of Section 31(6)(a) Wet/Act 47/37.

Die binnegemelde eiendom groot / The withinmentioned property measuring (1) 6135 sq. m, (2) 2340 sq m

is kragtens / by virtue of art 8(3) wet 63 van 1975

onteien deur / expropriated by S.A.R.+H.

Kennisgewing No / Notice No C.193/78 gedateer/dated 26/7/78

Planne in duplikaat geliasseer met / Plans in duplicate filed with EX 17/78.

18-10-78.

VER VANG DEUR T15896/93 REGISTRATEUR AKTEKANTOOR KIMBERLEY

Aktekantoor, / Deeds Office, / Kimberley.

Registrateur van Aktes, / Registrar of Deeds.

Para 2.

Kragtens Notariële Akte / By Notarial Deed K 112/78S gedateer / dated

is die binnegemelde eiendom / the withinmentioned property Subject to a right to convey electricity over the said land i.f.o. E.S.Com.

soos meer volledig sal blyk uit gemelde Notariële Akte waarvan 'n afskrif hieraan / as will more fully appear from reference to the said Notarial Deed, a copy whereof

geheg is. / is hereunto annexed.

AKTEKANTOOR, / DEEDS OFFICE, / KIMBERLEY.

20-10-1978

D. G. ORSMOND

REGISTRATEUR/REGISTRAR.

Para 3

Ged 3 (ged. van Ged. 1) v.d. Plaas Beesthoek 448 = 9721 m²

GETRANSPORTEER TRANSFERRED	AAN TO Die Republiek van S.A.
No. T469/80	RESTANT REMAINDER 1303,6287 ha
15 - 4 - 1980	D. G. ORSMOND REGISTRATEUR REGISTRAR

Para 14(2)(N) SIEN

Endossement kragtens Artikel 31(6)a Wet 7/87
Endorsement in terms of section Act

OORWANG SIEN T1596/93 REGISTRATEUR

Die ingemelde eiendom groot ① 430 m² + 3100 m²
The within mentioned property measuring ② 1,7 ha

is kragtens has by virtue of Sec 7(4) of Exp. Act No 63/75

onteien deur been expropriated by Rep of SA in its Railways & Harbours

in terms van Gdn Kennisgewing Nr C109/80 gedateer dated 18/2/81.
in terms of ARTEKANTOOR KIMBERLEY

Posisie in ... met / Filed in support ... filed with EX 80/81

24-6-81

Aktekantoor, Deeds Office, Kimberley.

Registrateur van Aktes. Registrar of Deeds.

Para 3:

Ged 5 (Ged v. Ged 1) v.d. plaas Beesthoek nr. 448 = 2188 m²

GETRANSPORTEER TRANSFERRED	
No. T1176/81	RESTANT REMAINDER 1303,4099 ha.
1981 - 7 - 21	D. G. ORSMOND REGISTRATEUR REGISTRAR

VIR ENDOSSEMENTE KYK BLADSY 16 ET S
FOR ENDORSEMENTS SEE PAGE

PARA ① PORTION 1 OF THE FARM No. 434
= 11,8416 HA
PARA ② PORTION 3 OF THE FARM DOORNFONTEIN
No. 446 = 17,6839 HA
PARA ③ PORTION 6 (A PORTION OF PORTION 1) OF THE FARM BEESTHOEK No. 448 = 4,2590 m²

PARA 3:
③ Portion 7 (A PORTION OF PORTION 1) OF THE FARM BEESTHOEK NO. 448 = 25,0390 HA

GETRANSPORTEER AAN / TRANSFERRED TO	
TRANSNET BEPERK.	
Para 1: 3278.1164. Para 2: 4776.4542	
RESTANT/REMAINDER = Para 3: 1271.9450	
T 1596 /93	[redacted]
16 MAR 1993	REGISTRATEUR/REGISTRAR

KRAGTENS DIE REGISTRASIE ~~VAN~~ T /92 IS
DAAR NOU ~~FOLIO~~ EIENDOM AAN ONTEIENINGS KENNISGEWINGS
~~NR'S~~

Para 3

Endossement kragtens Artikel 9(1) Wet 37/1955
Endorsement in terms of Section .... Act ....

Portions of Die binnegemelde eiendom groot / The within mentioned property measuring approximately 6 ... morgen

is kragtens / has by virtue of Sec. 11(1)(b) of Act 37/1955

onteien deur / been expropriated by South African Railways & Harbours

in terme van onteienings-kennisgewing Nr. / in terms of expropriation notice No. C.28/62 gedateer / dated 1/6/1962

Planne in duplikaat weggelê met / Plans in duplicate filed with herewith

15. 6.1962

Aktekantoor, Deeds Office, Kimberley.

Registrateur van Aktes. / Registrar of Deeds.

VERVANG SIEN AKTEKANTOOR KIMBERLEY REGISTRATEUR

Para 3

Endossement kragtens Artikel 3 Wet 47/37
Portions of Endorsement in terms of Section .... Act ....

Die binnegemelde eiendom groot / The within mentioned property measuring approx. 156 200 sq feet 1.82 morgen 1.85 M. 1.50 M. 4.28 M. en 1.96 morgen

Is kragtens / has by virtue of Sec. 11(1)(b) of Act 37/1955

onteien deur / been expropriated by S.A.R. & H. administration

In terme van onteienings Kennisgewing Nr / In terms of expropriation Notice No. C.228/65 gedateer / dated 29/10/6..

Planne in duplikaat weggelê met / Plans in duplicate filed with herewith

9 -3- 1966

Aktekantoor, Deeds Office, Kimberley.

Registrateur van Aktes. / Registrar of Deeds.

VERVANG SIEN AKTEKANTOOR KIMBERLEY REGISTRATEUR

Paras 1 & 2.

Die eiendom / The said ... Herein ...
beskrywe en moet in die toekoms beskrywe word / ... and must in future be described
Para 1 The farm Paling No 434
Para 2 The farm Doornfontein No 446

Aktekantoor / Deeds Registry, Kimberley.

13 -5- 1970

C. J. P. LA GRANGE
Registrateur. / Registrar.

DIE GROOTTE VAN BINNEGEMELDE EIENDOM
THE EXTENT OF THE WITHINMENTIONED PROP-
OMSKEP IN METRIEKE MATE IS
ERTY CONVERTED TO METRIC MEASURES IS
Para 1. 5289,9580 HEKTAAR ~~METERS~~
Para 2. 4794.1381 HECTARE(S) ~~METRES~~

13 -5- 1970

C. J. P. LA GRANGE
ASST.-REGISTRATEUR VAN AKTES
ASST. REGISTRAR OF DEEDS.

Kragtens Notariële Akte / By Notarial Deed No. 18/70S gedateer / dated 1/5/70

is die hierinvermelde eiendom / the within-mentioned property subject to a perpetual right to convey electricity i.f.o. the Electricity Supply Commission

soos meer volledig sal blyk uit gemelde Notariële Akte waarvan 'n afskrif hieraan as will more fully appear from reference to the said Notarial Deed, a copy whereof

geheg is. / is hereunto annexed,

AKTEKANTOOR, DEEDS OFFICE, KIMBERLEY.

13 -5- 1970

C. J. P. LA GRANGE
REGISTRATEUR/REGISTRAR.

UITGEREIK VIR INLIGTING DOELEINDES
ISSUED FOR INFORMATION PURPOSES

BLADSY/PAGE 11

ENDOSSEMENT OP
ENDORSEMENT ON T245/54

EIENDOM/PROPERTY Daamwag
Hay WOP

Page 2

Kragtens Notariële Akte / By Notarial Deed No K103/74 Gedateer / Dated 28/10/74

Is die hierinvermelde eiendom / the within-mentioned property subject to a right to
convey electricity over the said land
to ESCOM

soos meer volledig sal blyk uit gemelde Notariële Akte ~~waarvan 'n afskrif hiervan~~ as will more fully appear from reference to the said Notarial Deed ~~a copy whereof~~

~~Word~~ / ~~Is~~ ~~not~~ endorsed,

AKTEKANTOOR,
DEEDS OFFICE,
KIMBERLEY. 5 - 11 - 1974

T. J. PIENAAR
REGISTRATEUR/REGISTRAR.

VIR ENDOSSEMENTE KYK BLADSY 12 ET SEQ.
FOR ENDORSEMENTS SEE PAGE

DIAGRAM PAGE 12.
ENDOSSEMENT OP
ENDORSEMENT ON T245/74
EIENDOM/PROPERTY Farm 446/R.E.
Hay

Para. 2. 97

Endossement kragtens Artikel 31. Wet 47/37.
Endorsement in terms of Section 31. Act 47/37.
Die binnegemelde eiendom groot
The within mentioned property measuring 1630 sk. meter.
is kragtens
has by virtue of Art 11(1) b Wet 37 van 1955.
onteien deur
been expropriated by SAS en H. administrasie.
in terme van
in terms of C 195/74 gedateer/dated 20/12/74
Plane in duplikaat weggebêre met
Plans in duplicate filed with Ex 23/75.
13-1-1975
Aktekantoor,
Deeds Office,
Kimberley.

Registrateur van Aktes,
Registrar of Deeds.

GEROOFDE STAN F REGISTRATEUR AKTEKANTOOR KIMBERLEY

UITGEREIK VIR INLIGTING DOELEINDES
ISSUED FOR INFORMATION PURPOSES

Paragraaf endossement T469/80

Endossement kragtens Artikel 31(6) Wet 47/37
Endorsement in terms of Section 31(6) Act 47/37
Die binnegemelde eiendom groot
The within mentioned property measuring ongeveer 0,9713 hektaar
is kragtens
has by virtue of Artikel 2(1) Wet 55/65
onteien deur
been expropriated by Republiek van Suid Afrika
in terme van onteienings Kennisgewing Nr.
in terms of expropriation Notice No. gedateer/dated 10/12/75
Planne in duplikaat weggebêre met
Plans in duplicate filed with EX 85/75

Aktekantoor,
Deeds Office,
Kimberley.

Registrateur van Aktes
Registrar of Deeds

Hierdie les die regte lede 15-4-80 9/1/1980 ... VOORSMOND ... van Aktes

Johannesburg on the 1st March 1954, which Power of Attorney, witnessed accordingly to Law, was exhibited to me on this day.

AND THE APPEARER declared that MANGANESE CORPORATION LIMITED had truly and legally sold on the 19th November 1953 and that he, in his capacity aforesaid, did by these presents cede and transfer in full and free property to and on behalf of

THE ASSOCIATED MANGANESE MINES OF SOUTH AFRICA, LIMITED

(White Group)

Its Successors in Title or Assigns :-

1. CERTAIN piece of abolished quitrent land being the Farm M. No. 87 PALING,

SITUATE in the Division of Hay,

MEASURING Three Thousand Eight Hundred and Forty One (3841) Morgen and Thirteen (13) Square Roods,

MORE FULLY DESCRIBED in the Deed of Grant thereof, with diagram annexed, made in favour of Daniel Francois Marais on the 5th May 1886, and subsequent Deeds of Transfer thereof, the last of which No. 20408 was made in favour of Manganese Corporation Limited on the 30th January 1930;

SUBJECT TO the conditions referred to in Deed of Transfer No. 18763 dated the 23rd August 1926,

AND SPECIALLY SUBJECT TO the following conditions contained in the said Deed of Grant (HAY QUITRENTS VOLUME 10 FOLIO 14) namely :-

"III. That all roads and thoroughfares described in the Diagram shall remain free and uninterrupted unless the same he closed or altered by competent authority.

IV ....

IV. That the Government shall always have the right to make new roads, railways, and railway stations, aqueducts, dams, and drains, or to conduct telegraphs over the land hereby granted for the benefit of the public, and to establish convenient outspans for the use of travellers, and to enter on the land for the purpose of digging and searching for minerals and precious stones : Provided that the Proprietor shall be entitled to be paid such sum of money, in compensation, as three Appraisers, one to be appointed by each side, and a third to be chosen by the two others, before proceeding to act, or any two of them, shall award.

V. That the Government shall at all times have the right of resuming the whole or a portion of the land hereby granted, if required for the working of any Mine or for other public purposes on payment to the Proprietor of such sum of money in compensation as may be mutually agreed upon by the parties concerned, or failing such agreement, as may be awarded by Appraisers appointed in manner provided in the preceding Condition IV.

VI. That the rights of the proprietor shall not extend to any deposits of gold, silver or precious stones which may at any time be, or be discovered, on the land hereby granted.

VIII. That the Proprietor shall allow to the public travelling along any of the roads running over the land hereby granted the right to pass over and graze their loose cattle, horses, sheep and goats to an extent not exceeding four hundred yards on each side of any such road, and to outspan, graze and water stock upon the land hereby granted.

~~IX. That no condition not expressed shall be presumed to exist.~~

~~FURTHER~~ ....

2. Certain

2. CERTAIN piece of abolished quitrent land being the Remaining Extent of the farm known as DOORNFONTEIN M. No. 82,

SITUATE in the Division of Hay,

MEASURING AS PER SUCH REMAINING EXTENT Five Thousand Five Hundred and Ninety Seven (5597) Morgen and Ninety (90) Square Roods,

MORE FULLY DESCRIBED in the Deed of Grant of the whole of the said Farm, with Diagram annexed, made in favour of Theodorus Hermanus Scherman on the 24th April 1883, and subsequent Deeds of Transfer thereof, the last of which No. 20408 was made in favour of the Manganese Corporation Limited on the 30th January 1930;

SUBJECT TO the conditions referred to in Deed of Transfer No. 18763 dated the 23rd August 1926,

AND SPECIALLY SUBJECT TO the following conditions contained in the said Deed of Grant (HAY QUITRENTS VOLUME 3 FOLIO 18) namely :-

"That all roads and thoroughfares now existing on the said land, shall remain free and uninterrupted, and that the Government reserves the right to make, or cause to be made on, or across the said land, for the public benefit, such Roads, Railroads, Railway Stations, Paths, Aqueducts, Dams, Drains, Reservoirs, Watercourses or other Public Works as may be required, as also to conduct Telegraphs over the said land, and to establish convenient Outspans for the use of Travellers.

That.....

That the Government reserves also the right, at all times, to enter upon the said land and to take, excavate, dig or quarry all such stones, earth, gravel or other materials as shall or may be required for any such Public Works as in the preceding condition specified, without compensation to the Proprietor, and that all Public Officers employed by Government as Surveyors, Engineers or the like, shall have the right to travel over and remain upon the said land with their Servants, Horses, Cattle and Equipages.

That the Government reserves the rights to all precious stones, gold or silver found on or under the surface of the said land.

And, lastly, that the said land shall be subject to all such duties, rules and regulations as either now are, or hereafter may be, in force with regard to lands granted on similar tenure."

3. CERTAIN piece of abolished quitrent land being the Remaining Extent of Lot A, portion of the Farm Beesthoek (formerly Farm M No. 81),

SITUATE in the Division of Hay,

MEASURING AS SUCH REMAINING EXTENT One Thousand Five Hundred and Twenty Three decimal One One Nine Eight (1523.1198) Morgen,

MORE FULLY DESCRIBED in the Deed of Transfer thereof No. 20339, with Diagram annexed, made in favour of Manganese Corporation Limited on the 19th November 1929.

SUBJECT TO the conditions referred to in the said Deed of Transfer No. 20339,

AND SPECIALLY SUBJECT TO the following conditions contained in the Deed of Grant (HAY QUITRENTS VOLUME 8 FOLIO 9) made in favour of Thomas Green on the 16th February 1885, namely :-

"III ....

"III. That all Roads and Thoroughfares described in the Diagram shall remain free and uninterruped, unless the same be closed or altered by competent authority.

IV. That the Government shall always have the right to make new roads, railways, and railway stations, aqueducts, dams and drains, or to conduct telegraphs over the land hereby granted for the benefit of the public, and to establish convenient outspans for the use of travellers, and to enter on the land for the purpose of digging and searching for minerals and precious stones : Provided that the proprietor shall be entitled to be paid such sum of money in compensation as three Appraisers, one to be appointed by each side, and a third to be chosen by the two others, before proceeding to act, or any two of them shall award.

V. That the Government shall at all times have the right of resuming the whole or a portion of the land hereby granted, if required for the working of any mine or for other public purposes, on payment to the Proprietor of such sum of money in compensation as may be mutually agreed upon by the parties concerned, or failing such agreement, as may be awarded by Appraisers appointed in manner provided in the preceding Condition IV.

VI. That the rights of the proprietor shall not extend to any deposits of gold, silver or precious stones which may at any time be, or be discovered, on the land hereby granted.

VIII. That the Proprietor shall allow to the public travelling along any of the roads running over the said land the right to pass over and graze their loose cattle, horses, sheep and goats to an extent not exceeding four hundred yards on each side of any such road, and to outspan, graze and water stock upon the land hereby granted.

FURTHER.....

FURTHER SPECIALLY SUBJECT TO :-

(a) The terms of Notarial Deed No. 8/1939S dated the 25th October 1939, and registered on the 22nd December 1939, in terms whereof the free, sole and exclusive trading rights on, over and in respect of the property hereby conveyed have been granted to the Mine and Country Stores (Proprietary) Limited.

(b) To the terms of Notarial Deed of Servitude No. 260 dated the 9th December 1930, and registered on the 15th December 1930, in terms whereof the Government of the Union of South Africa in its Railways and Harbours Administration retains possession of the material used in or about certain Railway Siding and Siding Extension situate on the property hereby conveyed and connecting with the S. A. Railways.

WHEREFORE the Appearer in his said Capacity, renouncing all the right and title MANGANESE CORPORATION LIMITED heretofore had to the premises, did, in consequence also acknowledge MANGANESE CORPORATION LIMITED to be entirely dispossessed of and disentitled to the same; and that by virtue of these presents, the said

THE ASSOCIATED MANGANESE MINES OF SOUTH AFRICA, LIMITED

its Successors in Title or Assigns now are and henceforth shall be entitled thereto conformably to local custom; Government, however, reserving its rights; and finally acknowledging MANGANESE CORPORATION LIMITED to be satisfactorily paid the whole of the purchase money amounting to the sum of

FOUR HUNDRED AND SEVENTY THOUSAND POUNDS
(£470,000. 0. 0.)

which consideration includes the following :-

(1) The Remaining Extent of the farm McCARTHY Division of Kuruman,
Measuring as such Eight Hundred and Ninety (890) Morgen Seventy Seven (77) Square Roods.

(2).....

(2) The Remaining Extent of the farm KADGAME, Division of Kuruman, Measuring as such Three Hundred and Eighty (380) Morgen Four Hundred and Ninety (490) Square Roods.

(3) The farm BRUCE, Division of Kuruman, Measuring Two Thousand Eight Hundred and Sixty Four (2864) Morgen Two Hundred and Fifty Five (255) Square Roods.

(4) The farm KING, Division of Kuruman, Measuring Two Thousand Eight Hundred and Twenty Four (2824) Morgen Three Hundred and Thirty Two (332) Square Roods.

(5) The base metals and base mineral rights in and over the Remaining Extent of the farm JENKINS, Division of Kuruman, Measuring as such Seven Hundred and Forty One (741) Morgen Ninety Two (92) Square Roods.

(6) A Notarial Agreement between the Transferor Company and the Transferee Company in terms of which certain Notarial Deed of Cession of Mineral Rights dated 4th December 1935 registered on 14th December 1935 in the Deeds office at Kimberley is amended as will appear more fully from the said Notarial Agreement.

(7) A Notarial Agreement between the Transferor Company and the Transferee Company in terms of which certain Notarial Deed of Cession of Mineral Rights dated 4th December 1935 registered on 24th December 1935 under No. 13/1935 in the Deeds Office at Vryburg is amended as will more fully appear from the said Notarial Agreement.

(8) All the right, title and interest of the Transferor Company in and to -

(i) Certain railway siding and railway siding extension at Postmasburg, Cape Province, including loops used for the purpose of shunting trucks and a weighbridge.

(ii) Certain earthworks on the farms BEESTHOEK, DOORNFONTEIN and PALING, and

(iii) Certain light railway extending to a point in the vicinity of the boundary of the farm PALING;

less....

less that portion of the railway sold by The Associated Manganese Mines of South Africa, Limited to the South African Railways & Harbours under Agreement dated 14th January 1936 and 29th January 1936.

IN WITNESS WHEREOF I, the said Registrar, together with the Appearer, q.q. have subscribed to these presents and have caused the Seal of Office to be affixed thereto.

THUS DONE AND EXECUTED at the Office of the Registrar of Deeds, in KIMBERLEY, on the 11th day of May in the Year of Our Lord One Thousand Nine Hundred and Fifty Four (1954).

q.q.

In my presence,

REGISTRAR OF DEEDS,
KIMBERLEY.

REGISTERED IN THE REGISTER OF Hay Farms.
BOOK 6 FOLIO 19(2)
BOOK 4 FOLIO 20(17)
BOOK 3 FOLIO 17(4)

CLERK IN CHARGE.

ELLIOTT MARIS & WILMANS,
Attorneys, Notaries & Conveyancers,
S.A. Mutual Buildings, KIMBERLEY

INTERDICT

12 -6- 1965 R60,000.00

ORIGINAL STAMPED
Stamp Duty R415.00
Registration Fee R2.50
T.D. R2800.00

1 Canc Bond with 1(9) R1.25

1	VERBAND. BOND.
Vir Kans. For Cancn.	Vir Sed. Afbet. For Pt. Pmt.
Vir Onthef. For Release	Vir Sessie For Cession
Vir Afstand For Waiver	Vir Subst. For Substn.

T. 20146

Certified a true copy in terms of the provisions of Regulation 66 under the Deeds Registries Act, No 47 of 1937
Gesertifiseer 'n ware afskrif in terme van die bepalings van Regulasie 66 kragtens die Registrasie van Aktes Wet, No 47 van 1937.

FOR INFORMATION ONLY
SLEGS VIR INLIGTING

Registrasiekantoor
Deeds Registry,

REGISTRATEUR VAN AKTES
REGISTRAR OF DEEDS

Datum/Date 27 AUG 2013

Die grond / The land ......
is herommer en moet in die toekoms beskrywe word as / has been renumbered and must in future be described as
Restant van die plaas Beschoek Nr 448.
Akte Kantoor, Deeds Registry, Kimberley.
9-6-1965
Registrateur, Registrar.

659

1965

Deed of Transfer

(By virtue of a Power of Attorney).

Prepared by me
Conveyancer.

Know all men whom it may concern

THAT CHARLES MARIS
appeared before me, Registrar of Deeds, he being duly authorized thereto by a Power of Attorney dated 5th day of MAY 1965, executed at POSTMASBURG.
and granted to him by

PIETER EDUARD KRIEL
(Born 18th May, 1893)

a Member of the White Group as defined in the Group Areas Act No. 77 of 1957

AND..........

1

T659 65

Rest Ung

die Plaas Beesthoek

No 448 Hay

Kragtens Notariële Akte K.114/785 gedateer
By Notarial Deed No. dated

Is die hierinvermelde eiendom is subject to
the within-mentioned property convey Electricity in favour of
E S Com.

soos meer volledig blyk uit gemelde Notariële Akte waarvan 'n afskrif hieraan
as will more fully appear from reference to the said Notarial Deed, a copy whereof

geheg is.
is hereunto annexed,

AKTEKANTOOR,
DEEDS OFFICE,
KIMBERLEY.
20-10-1978

D. G. ORSMOND
REGISTRATEUR/REGISTRAR.

UITGEREIK VIR INLIGTING DOELEINDES
ISSUED FOR INFORMATION PURPOSES

Kragtens Notariële Akte K.115/785 gedateer
By Notarial Deed No. dated

Is die hierinvermelde eiendom is subject to
the within-mentioned property convey electricity in favour of
E S Com.

soos meer volledig blyk uit gemelde Notariële Akte waarvan 'n afskrif hieraan
as will more fully appear from reference to the said Notarial Deed, a copy whereof

geheg is.
is hereunto annexed,

AKTEKANTOOR,
DEEDS OFFICE,
KIMBERLEY.
20-10-1978

D. G. ORSMOND
REGISTRATEUR/REGISTRAR.

Ged H. Id Plaas Beesthoek No 448 - 9996 oh

AKTEKANTOOR
DEEDS OFFICE

T 56/79

AAN
TO E.V.K. O.M.

RESTANT
REMAINDER 1540 9693 ha

REGISTRATEUR
REGISTRAR

FOR FURTHER ENDORSEMENTS SEE
VIR VERDERE INDOSSEMENTE SIEN 8

PLAASVPAGE 8.
TOEGESKRYF OP
ENDORSEMENT ON 1659/65
LENDOM/PROPERTY Rest Gld
Plaas Beesthoek No
448 Hay.

Die hiernagemelde eiendom is onderworpe aan voorwaardes soos deur die Administrateur opgelê soos meer volledig sal blyk uit "Aanhangsel A" hierby aangeheg.

-6-2-1979
Aktes Kantoor
Kimberley.

D. G. ORSMOND
Reg. van Aktes

Dele by 1-659/1965.

AANHANGSEL "A".

EN SPESIAAL ONDERHEWIG aan die volgende voorwaardes opgelê en afdwingbaar deur die Administrateur van die Kaap die Goeie Hoop, naamlik -

(1) Die eienaar van hierdie erf is verplig om sonder betaling van vergoeding, toe te laat dat hoofgasleidings, elektrisiteits-telefoon- en televisiekabels en/of -drade, hoof- en ander waterpype en die rioolvuil en dreinering, insluitende stormwater van enige ander erf of erwe, oor hierdie erf gevoer word indien dit deur die plaaslike owerheid nodig geag word, en wel op die wyse en plek wat van tyd tot tyd redelikerwys vereis word. Dit sluit die reg op toegang te alle redelike tye tot die eiendom in met die doel om enige werke met betrekking tot bogenoemde aan te lê, te wysig, te verwyder of te inspekteer.

(2) Die eienaar van hierdie erf is verplig om sonder vergoeding op die erf die materiaal te ontvang of uitgrawings op die erf toe te laat al na vereis word, sodat die volle breedte van die straat gebruik kan word en die wal veilig en behoorlik skuins gemaak kan word weens die verskil tussen die hoogte van die straat soos finaal aangelê en die erf tensy hy verkies om steunmure te bou tot genoeë van en binne 'n tydperk wat die plaaslike owerheid bepaal

AND the Appearer declared that on 25th March, 1965 his Principal as aforesaid sold the following property to the undermentioned transferee

NOW THEREFORE the said Appearer in his capacity as aforesaid, did, by these presents cede and transfer in full and free property, to and on behalf of

THE ASSOCIATED MANGANESE MINES OF SOUTH AFRICA LIMITED.

-The Controlling Interest wherein is held by Members of the White Group as defined in the Group Areas Act No. 77 of 1957

its ~~Heirs, Executors, Administrators~~ Successors in Title or Assigns

CERTAIN.....

CERTAIN Remaining Extent of Lot No.81 M, known as BEESTHOEK"

SITUATE in the Division of Hay

MEASURING as such One Thousand Eight Hundred (1,800) morgen One Hundred and forty eight (148) square roods.

MORE FULLY DESCRIBED in the Deed of Grant thereof (Hay Quitrents Volume 8 folio 9) with Diagram annexed, made in favour of Thomas Green on the 18th February, 1885, and subsequent Deeds of Transfer, the last of which No.20146 was made in favour of the Appearer's Principal on the 30th July, 1929

SUBJECT to all such terms and conditions as are in Deed of Transfer No.20146 dated 30th July, 1929 referred.

FURTHER SUBJECT to the conditions contained in the above-mentioned Deed of Grant :

III "That all roads and thoroughfares described in the Diagram shall remain free and uninterrupted unless the same be closed or altered by competent Authority."

IV. "That the Government shall always have the right to make new roads, railways and railway Stations, aqueducts, dams and drains, or to conduct telegraphs over the land hereby granted for the benefit of the public, and to establish convenient outspans for the use of travellers, and to enter on the said land for the purpose of digging and searching for minerals and precious stones: Provided that the Proprietor shall be entitled to be paid such sum of money, in compensation, as three Appraisers, one to be appointed by each side, and a third to be chosen by the two others, before proceeding to act, or any two of them, shall award.

V.....

V. "That the Government shall at all times have the right of resuming the whole or a portion of the land hereby granted, if required for the working of any mine, or for other public purposes, on payment to the Proprietor of such sum of money in compensation as may be mutually agreed upon by parties concerned, or, failing such agreement, as may be awarded by Appraisers appointed in manner provided in preceding Condition IV."

VI. "That the rights of the proprietor shall not extend to any deposit of gold, silver or precious sones, which may at any time be, or be discovered, on the land hereby granted.

VIII. "That the Proprietor shall allow to the public travelling along any of the roads running over the land hereby granted the right to pass over and graze their loose cattle, sheep and goats, to an extent not exceeding four hundred yards of each side of any such road, and to outspan graze and water stock upon the land hereby granted."

NOT SPECIALLY SUBJECT to the terms of

(a) Mineral Lease No.165 dated the 28th November, 1925 passed before the Notary Andries Jacobus Bester, whereby the right to prospect, dig and mine for base metals and base minerals on the said property was granted and registered in the Deeds Registry, Kimberley, on the 28th March, 1927, and the Right of Renewal for a period of 16 years reckoned from 1st January 1931 was registered on 9th September, 1931, which lapsed by effluxion of time.

SPECIALLY SUBJECT To the terms of

(b) Notarial Deed No.9/1958 whereby the Trading Rights over the remaining Extent of the within property have been granted to Glosham stores (Proprietary) Limited

for.....

for a period of fifteen (15) years from the 1st October, 1957 with the right of renewal for a further fifteen (15) years on such terms as are fully set out in the said Notarial Lease which lease was registered in the Deeds Registry, Kimberley on the 30th April, 1958.

NOT SUBJECT to the terms of Notarial Agreement No.12/1958 S registered in the Deeds Registry, Kimberley on the 5th June, 1958 which terms ofthe said Notarial Agreement lapsed by merger by reason of this transfer.

WHEREFORE.....

WHEREFORE the Appearer in his said Capacity, renouncing all the right and title his said Principal heretofore had to the premises, did, in consequence also acknowledge his said Principal to be entirely dispossessed of, and disentitled to the same ; and that by virtue of these presents, the said

THE ASSOCIATED MANGANESE MINES OF SOUTH AFRICA LIMITED

its ~~Heirs, Executors, Administrators~~ Successors in title or Assigns, now is and henceforth shall be entitled thereto conformably to local custom ; ~~Government~~ State, however, reserving its rights ; and finally acknowledging his said Principal to be satisfactorily paid the whole of the purchase money amounting to the sum of

SIXTY THOUSAND RAND (R60,000)

IN WITNESS whereof, I, the said Registrar, together with the Appearer q.q. have subscribed to these presents and have caused the Seal of Office to be affixed thereto.

Thus done and executed, at the Office of the Registrar of Deeds, in KIMBERLEY on the 9th day of JUNE in the Year of our Lord, One Thousand Nine Hundred and sixty five (1965).

q.q.

In my presence

REGISTRAR OF DEEDS.

Registered in the Register of New Farms

Book H Folio H-H-8

Clerk in Charge.

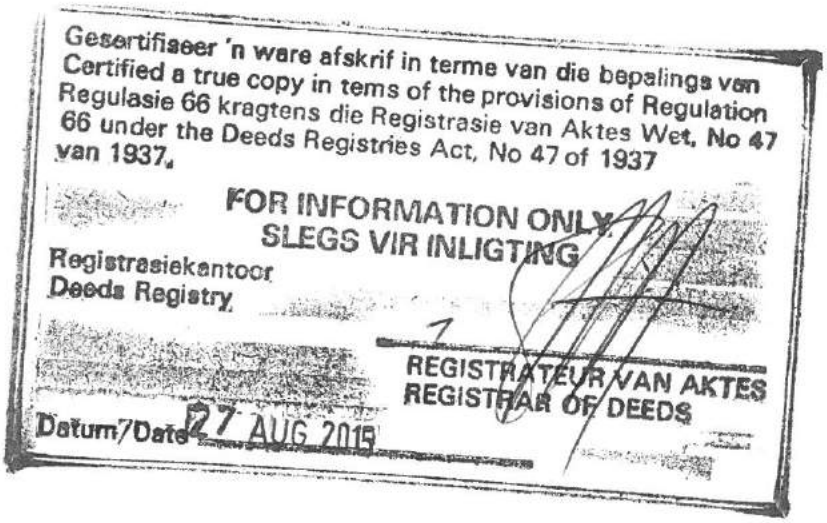
Duncan & Rothman

MT/cj/K.980184

Opgestel deur my,

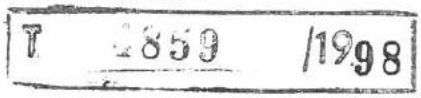
TRANSPORTBESORGER

TESELING M H



SERTIFIKAAT VAN VERENIGDE TITEL

UITGEREIK KRAGTENS DIE BEPALINGS VAN ART. 40 VAN DIE REGISTRASIE VAN AKTESWET



NADEMAAL

THE ASSOCIATED MANGANESE MINES OF SOUTH AFRICA LIMITED
Registrasie nr. 05/07343/36

aansoek gedoen het vir die uitreiking aan hom van 'n Sertifikaat van Verenigde Titel kragtens die bepalings van Artikel 40 van die Registrasie van Aktes Wet, 1937; en

NADEMAAL hy die geregistreerde eienaar is van:

1. SEKER Restant van die Plaas OLYN FONTEIN NR. 475

GELEë in die distrik Hay, Provinsie Noordkaap

GEHOU kragtens Akte van Transport nr. T2925/1997

2. SEKER Restant van Gedeelte 1 van die Plaas OLYN FONTEIN NR. 475

GELEë in die distrik Hay, Provinsie Noordkaap

GEHOU kragtens Akte van Transport nr. T 4858 /1998

wat verenig is tot die grond hieronder beskryf;

SO IS DIT dat, ingevolge die bepalings van genoemde Wet, ek, die Registrateur van Aktes te Kimberley, hierby sertifiseer dat voornoemde

THE ASSOCIATED MANGANESE MINES OF SOUTH AFRICA LIMITED
Registrasie nr. 05/07543/36

Die se Opvolgers in Titel en Regsverkrygendes, die geregistreerde eienaar is van:

SEKER Gedeelte 4 van die Plaas OLYN FONTEIN NR. 475

GELEë in die distrik Hay, Provinsie Noordkaap

GROOT 2270,1079 (Twee Duisend Twee Honderd en Sewentig Komma Een Nul Sewe Nege) hektaar

SOOS AANGEDUI op die aangehegte Kaart L.G. 644/1998

A. Die geheel van die eiendom is onderhewig aan die volgende voorwaardes geskep in Grondbrief (HAY ERFPAGTE BOEK 2, FOLIO 15), naamlik:

"III. That the Government reserved the rights to all precious stones, gold and silver found on or under the surface of the said land.

IV. That the said land shall be subject to all such duties, rules and regulations as either now are, or hereafter may be in force with regard to lands granted on similar tenure."

B. Die figuur AkGHJ soos aangedui op die aangehegte Kaart LG644/1998 is onderhewig aan die voorbehoud van alle regte tot onedele minerale en onedele metale ten gunste van "Associated Manganese Mines of South Africa Limited" welke regte gesedeer was aan "Associated Manganese Mines of South Africa Limited" kragtens Akte van Sessie nr. 8/64CRM.

C. Die figuur kBCDEF soos aangedui op die aangehegte Kaart LG644/1998 is onderhewig aan:

i. In Notariële Akte van Sessie nr. 2/1956, ten opsigte waarvan alle regte tot onedele metale en minerale uitsluitende goud, silwer en edelgesteentes bykomende regte sedeer is aan die Griqualand Iron Ore (Proprietory) Limited; en

ii. Notariële Ooreenkoms nr. 15/69S, in terme waarvan die eiendom onderworpe is aan die reg ten gunste van Western Manganese (Proprietory) Limited aan alle water van 'n boorgat op die eiendom te gebruik, soos meer ten volle sal blyk uit gemelde Notariële Akte.

9

EN DAT kragtens hierdie Sertifikaat, genoemde

THE ASSOCIATED MANGANESE MINES OF SOUTH AFRICA LIMITED
Registrasie nr. 05/07343/36

Die se Opvolgers in Titel en Regsverkrygendes nou en voortaan daartoe geregtig is ooreenkomstig plaaslike gebruik, maar behoudens die reg van die Staat.

TEN BEWYSE WAARVAN ek, voornoemde Registrateur, hierdie Akte onderteken en met die Ampseël bekragtig het.

ALDUS GEDOEN en GETEKEN in die Kantoor van die Registrateur van Aktes te KIMBERLEY op

1998 -11- 17

REGISTRATEUR VAN AKTES
KIMBERLEY

UITGEREIK VIR INLIGTING DOELEINDES
ISSUED FOR INFORMATION PURPOSES

Appendix 3: Site Layout

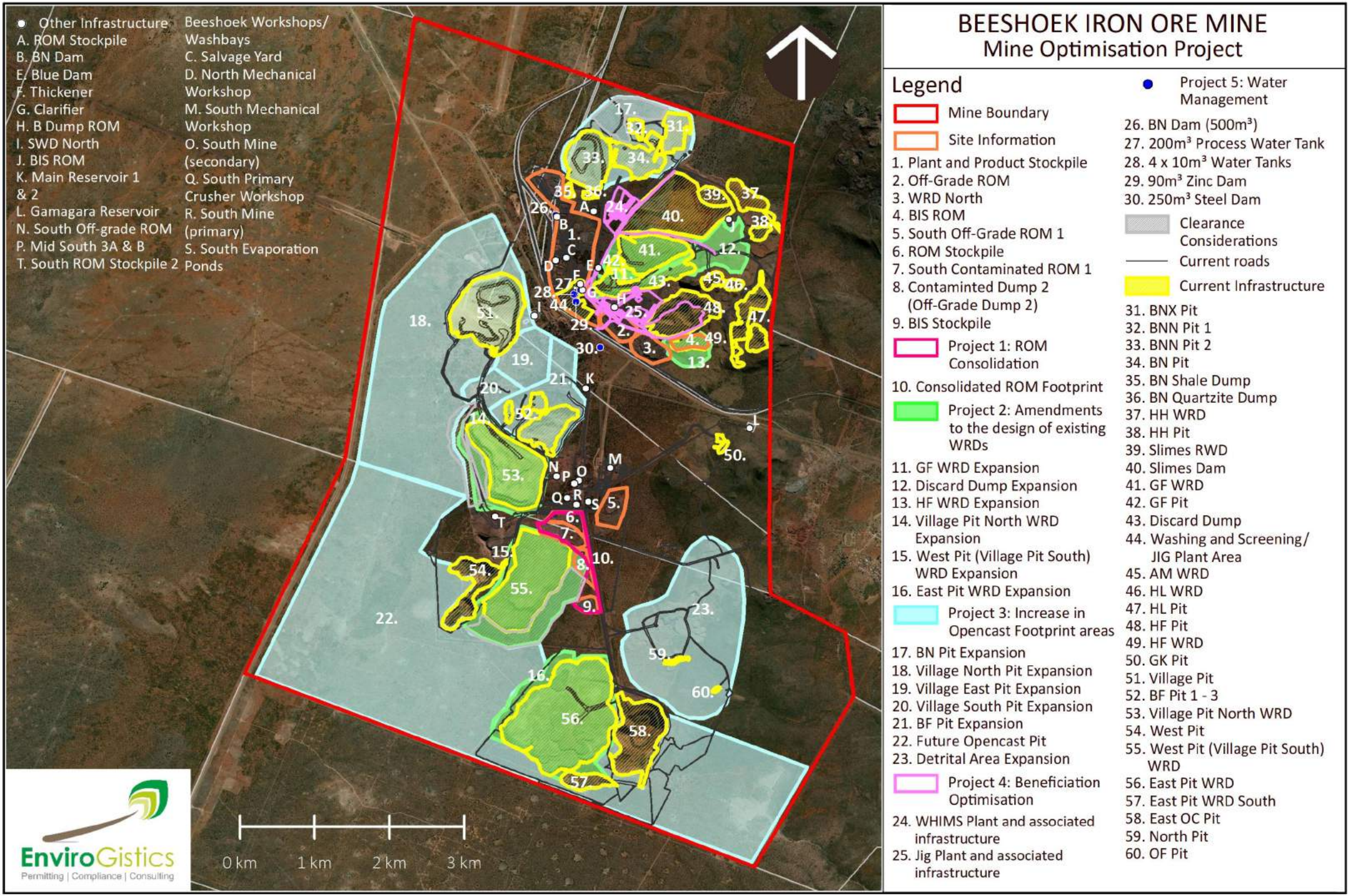
CADASTRAL INFORMATION

BEESHOEK IRON ORE MINE
Mine Optimisation Project

Legend

- Surface Right Area
- Mining Right Area
- Farm Portions

EnviroGistics
Permitting | Compliance | Consulting



BEESHOEK IRON ORE MINE
Mine Optimisation Project

Legend

Mine Boundary

Site Information

1. Plant and Product Stockpile
2. Off-Grade ROM
3. WRD North
4. BIS ROM
5. South Off-Grade ROM 1
6. ROM Stockpile
7. South Contaminted ROM 1
8. Contaminted Dump 2 (Off-Grade Dump 2)
9. BIS Stockpile

Project 1: ROM Consolidation

10. Consolidated ROM Footprint

Project 2: Amendments to the design of existing WRDs

11. GF WRD Expansion
12. Discard Dump Expansion
13. HF WRD Expansion
14. Village Pit North WRD Expansion
15. West Pit (Village Pit South) WRD Expansion
16. East Pit WRD Expansion

Project 3: Increase in Opencast Footprint areas

17. BN Pit Expansion
18. Village North Pit Expansion
19. Village East Pit Expansion
20. Village South Pit Expansion
21. BF Pit Expansion
22. Future Opencast Pit
23. Detrital Area Expansion

Project 4: Beneficiation Optimisation

24. WHIMS Plant and associated infrastructure
25. Jig Plant and associated infrastructure

Project 5: Water Management

26. BN Dam (500m³)
27. 200m³ Process Water Tank
28. 4 x 10m³ Water Tanks
29. 90m³ Zinc Dam
30. 250m³ Steel Dam

Clearance Considerations

Current roads

Current Infrastructure

31. BNX Pit
32. BNN Pit 1
33. BNN Pit 2
34. BN Pit
35. BN Shale Dump
36. BN Quartzite Dump
37. HH WRD
38. HH Pit
39. Slimes RWD
40. Slimes Dam
41. GF WRD
42. GF Pit
43. Discard Dump
44. Washing and Screening/ JIG Plant Area
45. AM WRD
46. HL WRD
47. HL Pit
48. HF Pit
49. HF WRD
50. GK Pit
51. Village Pit
52. BF Pit 1 - 3
53. Village Pit North WRD
54. West Pit
55. West Pit (Village Pit South) WRD
56. East Pit WRD
57. East Pit WRD South
58. East OC Pit
59. North Pit
60. OF Pit

Appendix 4: Licences

mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

Private Bag X 6093, Kimberley, 8301, No.65 Phakamile Mabija Street, 1st Floor, Permanent Building, Kimberley, 8300

Enquiries: L.S Malatjie: Ref No: NC 30/5/1/2/3/2/1/ (223) MR
E-mail address: livhuwani.malatjie@dmr.gov.za
Mine Environmental Management

The Board of Directors

Assmang Limited

P.O Box 3002

POSTMASBURG

8400

FOR ATTENTION: The Manager

Mr Andrew Matolong

Tel: (053) 311 6666

E-mail: andrew.matolong@assmang.co.za

Dear Sir

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) (AS AMMENDED) (NEMA) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014: ACTIVITIES RELATED TO REDESIGNING THE EXISTING WATER CONTAINMENT FACILITY AND THE ASSOCIATED INFRASTRUCTURE ON PORTION 1 OF BEESHOEK NO.448 WITHIN THE MAGISTERIAL DISTRICT OF POSTMASBURG, NORTHERN CAPE PROVINCE.

Your application in the above regard refers.

DECISION ON ENVIRONMENTAL AUTHORISATION

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") and the Environmental Impact Assessment Regulations, 2014, ("EIA Regulations") the competent authority herewith **grants** environmental authorisation to the applicant to undertake the list of activities specified in Section B below and as described in the BAR dated 22nd June 2016.

The granting of this environmental authorisation is subject to compliance with the conditions set out in Section E below.

A. DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL AUTHORISATION

The Board of Directors
Assmang Limited
P.O Box 3002
POSTMASBURG
8400

Tel: (053) 311 6666
E-mail: andrew.matolong@assmang.co.za

The abovementioned company is the holder of this environmental authorisation and is hereinafter referred to as "the applicant".

B. LIST OF ACTIVITIES AUTHORISED

Government Notice No. R.983 Listing Notice 1 of 4 December 2014 –
Activity Number: 34
Activity Description: "The expansion or changes to existing facilities for any process or activity where such expansion or changes 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 or pollution"

(i) Construction of a pipeline of less than a kilometre;
(ii) A pump system; and
(iii) Lined Dam with a capacity of 15,500 m^3

The abovementioned list is hereinafter referred to as "the listed activity/ies".

The applicant is herein authorised to undertake the following alternative related to the listed activity/ies:

(i) Construction of a pipeline of less than a kilometre;

(ii) A pump system; and

(iii) Lined Dam with a capacity of 15,500 m^3

C. PROPERTY DESCRIPTION AND LOCATION

The listed activities will take place on Beeshoek no.448 and portion 1 to an extent of less than 5ha within the magisterial district of Postmasburg, Northen Cape Region, approximately 10 km West of Postmasburg town.

The SG digit codes are:
C03100000000044800001

Co-ordinates of the boundary of the property/ies are those that are described in the final site layout map attached hereto hereinafter referred to as "the site".

28 17 30.63 S; 22 59 46.48 E

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

ENVIROGISTICS (Pty) Ltd
Ms Tanja Bekker
P.O Box 22014
HELDERKRUIN
1733

Tel: (082) 412 1799
Fax: (086) 551 5233
E-mail: tanja@envirogistics.co.za

E. CONDITIONS OF AUTHORISATION

1. This environmental authorisation is conditional upon the implementation of the Environmental Management Programme identified and signed by the Regional Manager on today's date being implemented in full.

2. This environmental authorisation does not absolve the holder of its obligation to comply with the requirements of the National Water Act, Specific Environmental Management Acts and any other applicable legislation.

3. Subject to the commencement and duration requirements of the Mineral and Petroleum Resources Development Act, Act 28 of 2002 (as amended), the environmental authorisation for the listed construction activity is valid for the period for which the aforesaid right is granted provided that this activity must commence within 10 years.

4. The commissioning and decommissioning of individual activities within the overall listed construction activities must take place within the time periods as set out in the environmental management programme.

5. The listed activity/ies, including site preparation, must not commence within 20 (twenty) calendar days of the date of the notification of the decision being sent to the registered Interested and Affected Parties ("I&APs"). In the event that an appeal is lodged with the appeal administrator, the effect of this environmental authorisation is suspended until such time as the appeal is decided.

6. The applicant must in writing, within 14 (fourteen) calendar days of the date of this decision and in accordance with Regulation 4(2)

7.1 Notify all registered and affected parties of –

7.1.1 the outcome of the application;

7.1.2. the reasons for the decision as included in Annexure 1;

7.1.3. the date of the decision; and

7.1.4. the date of issue of the decision;

7.2 draw the attention of all registered I&APs to the fact that an appeal may be lodged against the decision in terms of the National Appeals Regulation, 2014 detailed in Section F below; and

7.3 draw the attention of all registered I&APs to the manner in which they may access the decision.

7.4 Provide the registered Interested and Affected Parties with:

7.4.1 name of the holder (entity) of this Environmental Authorisation;

7.4.2 name of the responsible person for this Environmental Authorisation;

7.4.3 postal address of the holder;

7.4.4 telephonic and fax details of the holder; and

7.4.5 e-mail address if any.

7. The holder is responsible for ensuring compliance with the conditions by any person acting on his/her behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder.

8. The holder of the EA must implement an Emergency Preparedness Plan and review it bi-annually when conducting audit and after each emergency and major incident. The holder must notify the competent authority in writing, within 24 hours thereof of the occurrence.

9. This environmental authorisation only authorises activities specified in the Environmental Management Programme ("EMP")/closure plan and a new authorisation must be applied for in respect of any new activity not specified as part of the EMP

10. A copy of the environmental authorisation and the EMPr must be kept at the site where the listed activity/ies will be undertaken. Access to the site must be granted to any authorised official representing a competent authority. The environmental authorisation and EMPr must be available on site to the aforesaid authorised official on request at all times.

11. Only activities that are expressly specified in the EMPr that forms part of this authorisation may be conducted, and additional or new activities not specified herein must be applied for by the holder and authorised by the competent authority in the form of an amendment or an addendum to the aforesaid EMPr before such activities may be commenced with. This condition is also applicable in the case of the amendment, addition, substitution, correction, and removal or updating of any detail in the aforesaid EMPr.

12. Whenever any of the applicant's contact details, physical or postal address and/ or telephonic details change, the applicant must notify the competent authority in writing to that effect.

13. Non-compliance with a condition of this environmental authorisation or EMP may result in the issuing of a directive in terms of section 28 and or a compliance notice in terms of section 31L of NEMA.

14. Should any heritage remains be exposed during excavations or any actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority (in accordance with the applicable legislation). Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from the Provincial Heritage Resources Authority. Heritage remains include: archaeological remains (including fossil bones and fossil shells); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artifacts and bone remains;

structures and other built features; rock art and rock engravings; shipwrecks; and graves or unmarked human burials.

15. A qualified archaeologist must be contracted where necessary (at the expense of the applicant and in consultation with the relevant authority) to remove any human remains in accordance with the requirements of the relevant authority.

16. The holder must appoint a suitably experienced environmental control officer ("ECO"), or site agent where appropriate, before commencement of any land clearing to ensure compliance with the EMPr and the conditions contained herein.

17. The holder of the environmental authorisation must annually assess the environmental liabilities of the operation by using the master rates in line with the applicable Consumer Price Index (CPI) at the time and address the shortfall on the financial provision submitted in terms of section 24P of NEMA.

18. The holder of the authorisation must appoint an independent auditor to audit the site annually. This auditor must compile an audit report documenting the findings of the audit.

The audit report must:

19.1 specifically state whether conditions of this environmental authorisation and EMPr/closure plan are adhered to;

19.2 identify and assess any new impacts and risks as a result of undertaking the activity/ies, if applicable;

19.3 identify shortcomings in the EMPr/closure plan, if applicable;

19.4 identify the need, if any, for any changes to the management, avoidance and mitigation measures provided for in the EMPr/closure plan;

19.5 if applicable, specify that the corrective action/s taken for the previous audit's non-conformities, was adequate; and

19.6 be submitted by the holder to the competent authority within 30 days from the date on which the auditor finalised the audit.

Should any shortcomings in terms of Regulation 34(4) be identified, the holder must submit recommendation to amend the EMPr/closure plan in order to rectify any shortcomings identified with the aforementioned audit report.

20 An integrated waste management approach, which is based on waste minimisation and incorporates reduction, recycling, re-use and disposal, where appropriate, must be employed. Any solid waste must be disposed of at a landfill licensed in terms of the applicable legislation.

21 No surface or ground water may be polluted due to any actions on the site. The applicable requirements with respect to relevant legislation pertaining to water must be met. No water can or may be extracted on the property on the portion 1 of farm Beeshoek.

22 The applicable requirements with respect to relevant legislation pertaining to cutting, damaging, disturbing or destroying protected trees or trees from a natural forest must be adhered to.

23 The applicable requirements with respect to relevant legislation pertaining to occupational health and safety must be adhered to.

24 The EA holder must before commencement of the construction activities consult with the communities and mines around regarding activities associated with the listed activity/ies.

25 You shall not store any fuel either above or underground, with a combined capacity of 80 cubic metres or more without an authorisation in each of

the above mentioned sites. All fuels and lubricants that are allowed to be stored in the sites must be stored inside a bounded area.

26 Should the holder of the Authorisation ever cease, he/she must take required actions as prescribed by legislation at the time and comply with all the relevant legal requirements administered by any relevant and competent authority at that time.

27 Any changes to or deviations from the activity description set out above must be approved in writing by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request information as it deems necessary to evaluate the significance and impacts of such changes or deviation and it may be necessary for the EA holder to apply for further authorisation in terms of the regulations.

F. APPEALS

Appeals must comply with the provisions contained in the National Appeal Regulations 2014.

1. An appellant must –

1.1. submit an appeal in accordance with Regulation 4 to the appeal administrator, within 20 (twenty) calendar days from the date the applicant notified registered I&APs of this decision;
1.2. If the appellant is the applicant, provide any registered I&AP, any Organ of State and the decision-maker with a copy of the appeal lodged with the appeal administrator;
1.3. If the appellant is a person other than the applicant, provide any registered I&AP, any Organ of State and the decision-maker with a copy of the appeal lodged with the appeal administrator;

1.2 The applicant (if not the appellant) the decision-maker, I&APs and Organ of State must submit their responding statement, if any, to the appeal authority and the appellant within 20 days from the date of receipt of the appeal submission.

1.3 The appeal form/s must be submitted by means of one of the following methods:

By post: Directorate Appeals and Legal Review
The Minister
Department of Environmental Affairs
Private Bag X 447
PRETORIA
0001

By facsimile: (012) 359 3609; or
By hand: Environmental House, Corner Steve Biko and Soutspanberg, Arcardia, Pretoria, 0083
By e-mail: appealsdirectorate@environment.gov.za

An electronic copy (word document format) of the appeal and its supporting documents must also be submitted.

1.4 A prescribed appeal form, as well as assistance regarding the appeal processes is obtainable from the office of the appeal authority/ at: Tel. (021) 483 3721, E-mail appealsdirectorate@environment.gov.za

G. DISCLAIMER

The Department of Mineral Resources in terms of the conditions of this environmental authorisation shall not be responsible for any damages or losses suffered by the holder, developer or his/her successor in any instance where

construction or operation subsequent to construction is temporarily or permanently stopped for reasons of non-compliance with the conditions as set out herein or any other subsequent document or legal action emanating from this decision.

Your interest in the future of our environment is appreciated.
Yours faithfully

Mr Sunday M. Mabaso
Regional Manager: Mineral Regulation (Northern Cape)

DATE OF DECISION: 10/03/2017

FOR OFFICIAL USE ONLY:

EIA REFERENCE NUMBER: NCS 30/5/1/2/3/2/1/ (223) MEM

ANNEXURE 1: REASONS FOR THE DECISION

In reaching its decision, the competent authority, inter alia, considered the following:

a) The information contained in the, application form as received by the competent authority on 04th April 2016, the Basic Assessment Report received by the competent authority on 22nd June 2016, the Environmental Management Programme ("EMPr") submitted together with the Basic Assessment Report, and the additional information received by the competent authority on the 30th June 2016;

b) Relevant information contained in the Departmental information base, including, the Department's circular on the One Environmental Management System dated 8 December 2014.

c) The objectives and requirements of relevant legislation, policies and guidelines, including Section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998)("NEMA");

d) The comments received from Interested and Affected Parties ("I&APs") and the responses provided thereon, as included in the Basic Assessment Report as annexure 6 and annexure 7,

e) Assmang Limited is the landowner of the property in question and holder of a mining right associated with this Environmental Authorisation application,

f) This application was submitted in terms of the 2014 NEMA Environmental Impact Assessment Regulations ("EIA Regulations"),

h) The sense of balance of the negative and positive impacts and proposed mitigation measures; and

i) The site visit was conducted on the 22nd August 2016 in order to gather sufficient information and have a picture of the area in question to assist the Department to make an informed decision.

All information presented to the competent authority was taken into account in the consideration of the application for environmental authorisation. A summary of the issues which, according to the competent authority, were the most significant reasons for the decision is set out below.

1. Exemption

No Exemption from NEMA and its Regulation was granted to the applicant by the competent authority. No Public Participation Process ("PPP") in accordance with Regulation 4(3) in terms of the National Exemption Regulations and Regulation 41 in terms of the EIA Regulation 2014 was conducted by the Department of Mineral Resources; the applicant and the Environmental Assessment Practitioner did the PPP and the Department was satisfied with the documentation that was submitted as a proof of the whole process.

2. Public Participation

No deviations requested and accepted by the Department from certain requirements of Regulation 41 of Government Notice No. R. 982.

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The PPP conducted as part of the Basic Assessment process included:

- identification of and engagement with I&APs;
- fixing a notice board at the site and any alternative site where the listed activity/ies is/are to be undertaken on 18th February 2016;
- giving written notice to the owners and occupiers of land adjacent to the site and any alternative site where the listed activity/ies is/are to be undertaken, the municipality and ward councillor, and the various Organs of State having jurisdiction in respect of any aspect of the listed activity/ies 07th April 2016 and 16th April 2016; and
- placing of a newspaper advertisement in the Kathu Gazette on the 13th February 2016 and Kathu Gazette on the 07th November 2015.

All the concerns raised by I&APs were responded to and adequately addressed during the PPP. Specific management and mitigation measures have been considered in this environmental authorisation and in the EMPr/closure plan to adequately address the concerns raised.

The Department concurs with the Environmental Assessment Practitioner's responses to the issues raised during the PPP and has included appropriate conditions in this environmental authorisation.

3. Alternatives

No alternatives have been requested or authorised. **Redesigning the existing storm water dam facility on site into a formally designed and lined facility** are the only major methods used in construction of a storm water dam. The technology to be used cannot be replaced by any other methods thus these are the preferred activities.

The "no-go" alternative is not to be closer to the 100m of any improvement of the mine such as mine pits and dumps.

4. Impacts, assessment and mitigation measures

4.1. Activity Need and Desirability

The project itself will lead to overall improved water management on site. No new activities are planned only the formalisation of the existing infrastructure. For this reason this project of improving the storm water management system should be regarded as an overall improvement in the water management on this site. The amendment of certain errors and exclusions in the 2014 Water Use License will contribute to the successful implementation of the WUL on site and the adherence to the conditions of the new WUL.

In terms of the Local Economic Development projects, the lawful operation of the mine allows the mine to contribute to the Local Economic Development programmes of the area.

4.2. Regional/ Planning Context

The proposed project have short term activities and in aim at enhancing operation of the Beeshoek Mine in which it is based in.

4.3. Services/ Bulk Infrastructure

No permanent structure will be developed on site since this operation will be taking place at an already established Beeshoek mine which has been operating for decades.

Since construction of this dam temporary until the dam is completed, the infrastructure of the mine will be used during that period and no new structures will be constructed on site. The applicant is Beeshoek mine and they will make agreements with the construction contractor so they can utilize the infrastructure like accommodation for the workers, access roads and other things like workshops.

4.4. Cumulative

There are no significant cumulative impacts associated with this activity.

4.5. Biophysical Impacts

Based on the biological impact assessment, a management programme is prepared which outlines the preventive and restorative measures for avoiding or reducing the impact of the construction of the dam and the area was previously disturbed as it formed part of the Beeshoek village.

4.6. Biodiversity

Assessment

The area is generally classified as a previously disturbed area as it was part of the demolished Beeshoek village.

Mitigation measures

The whole area will fall under the rehabilitation of the whole mine plan, as such the financial provision is also catered by the mine for all activities on site and such rehabilitation is outline in the Environmental Management Programme (EMPr) of Beeshoek mine. The mitigation measures to be undertaken also forms part of the mine EMPr.

4.7. Visual / Sense of Place

The prospecting activity will not change the visual character of the property.

4.8. Traffic

There won't much of the difference in terms of traffic since the area is situated within an operating Beeshoek mine.

4.9. Noise

Impact

Noise generation

Assessment

The area is located within the mining area and neighbouring the Village Opencast pit. Noise impacts are not considered to be significant but can occur during excavation and construction activities.

Mitigation

Monitoring by Environmental Control Officer monthly during contraction phase and then annually external audits can be undertaken, SHEQ will conduct such audits weekly.

4.10. Health Issues (including HIV & Aids)

There will be insignificant impact.

4.11. Heritage / Archaeological / Built Environment

Impact

Archaeology and Heritage destruction.

Assessment

The area on which the site will be extended was occupied by the beeshoek village. The village has subsequently been demolished. The possibility for subsurface artefacts should always be considered in any construction activity.

Mitigation

Where graves, artefacts or fossils are encountered during excavation activities, all activities must cease and the SAHRA should be contacted to determine the way forward before construction may continue

4.12. Socio-economic

The effect of this project in terms of socio-economic sector falls under bigger role that is played by Beeshoek mine through Social and Labour Plans and other platforms.

4.13. Stewardship Agreements

The landowner of the property in question is Beeshoek mine (the applicant).

4.15. Impact Assessment and significance

Any sites cleared must be rehabilitated as soon as possible by allowing self-succession and where it is found that self-succession is not taking place, a vegetation programme should be commissioned. Topsoil stripping should be undertaken and be stockpiled in designated areas, in close proximity to the dam for reuse in the rehabilitation of slopes and cleared areas. No water may be discharged into watercourses, if this water has not been treated to the correct quality or if approval from the DWS for such activity has not been obtained. There were no graves or any historical aspects which were identified during the assessment and it was identified during EIA that if all

negative impacts are avoided and where they cannot be avoided be mitigated and managed throughout the prospecting area then they will be insignificant. Natural ecosystems will not be compromised at a site, regional or local scale. Degradation can be mitigated through sound environmental rules, regulations and practices as stipulated in the EMPr. Vegetation Biomes are not threatened at local to regional scale, rehabilitation and mitigation will act to regenerate and restore land to its former state. Positive socio-economic effects will be multiplied at local to regional scale.

In summary the development will result in both negative and positive impacts.

Negative Impacts:

The proposed activities have very low significance since these are short term activities. The probability of occurrence of an impact was determined and most of these activities can be controlled and impacts can be reduced or avoided. The probability was also used basing on looking at other prospecting activities of similar nature. The planned activities negative impacts can be controlled and avoided or minimised therefore the layout does not require revision.

Positive impacts:

The positive impacts of the activities are the efficient containment of dirty water in the Beeshoek Mining operation which will in turn promote good water management techniques.

5. NEMA Principles

The NEMA Principles (set out in Section 2 of NEMA, which apply to the actions of all Organs of State, serve as guidelines by reference to which any Organ of State must exercise any function when taking any decision, and which must guide the interpretation, administration and implementation of any other law concerned with the protection or management of the environment), inter alia, provides for:

- the effects of decisions on all aspects of the environment to be taken into account;
- the consideration, assessment and evaluation of the social, economic and environmental impacts of activities (disadvantages and benefits), and for decisions to be appropriate in the light of such consideration and assessment;
- the co-ordination and harmonisation of policies, legislation and actions relating to the environment;
- the resolving of actual or potential conflicts of interest between Organs of State through conflict resolution procedures; and
- the selection of the best practicable environmental option.

6. Conclusion

In view of the above, the NEMA principles, compliance with the conditions stipulated in this environmental authorisation, and compliance with the EMPr/closure plan, the competent authority is satisfied that the proposed listed activity/ies will not conflict with the general objectives of Integrated Environmental Management stipulated in Chapter 5 of NEMA and that any potentially detrimental environmental impacts resulting from the listed activity/ies can be mitigated to acceptable levels.

-END-

water & sanitation
Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

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, ***Trevor Balzer,*** in my capacity as Deputy Director-General: Special Projects in the Department of Water and Sanitation: and acting under authority of the powers sub- delegated to me by the Acting Director- General of Water and Sanitation, hereby authorizes the following water uses in respect of this licence. **This Licence supersedes or replaces water use licence granted to Assmang (Pty) Ltd: Beeshoek Iron Ore Mine, licence number: 10/D73A/ABGJ/2592, dated 01 December 2014.**

SIGNED: Trevor Balzer

DATE: 21/08/2018

LICENCE NO: 10/D73A/ABGJ/2592
FILE NO: 27/2/2/D173/6/1

1.	**Licensee**	**Assmang (Pty) Ltd – Beeshoek Iron Ore Mine**
	Postal Address	Private Bag X3002 POSTMASBURG 8420

2. Water uses

2.1	Section 21(a) of the Act:	Taking of water from a water resource, subject to the conditions as set out in Appendices I and II.
2.2	Section 21(b) of the Act:	Storing of water, subject to conditions as set out in Appendices I and III.
2.3	Section 21(g) of the Act:	Disposing of waste in a manner which may detrimentally impact on a water resource, subject to the conditions as set out in Appendices I and IV.
2.4	Section 21(j) of the Act:	Removing, discharging or disposing of water found underground for the efficient continuation of an activity or for the safety of people, subject to the conditions as set out in Appendices I and V.

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3. Properties in respect of which this licence is issued

3.1 Portion 4 of the Farm Olynfontein 475

3.2 Portion 1 and Remaining Extent of the farm Beesthoek 448

4. Registered owner of the Properties

4.1 Assmang (Pty) Ltd

5. Licence and Review Period

5.1 This licence is valid for a period of twenty four (24) years and may be reviewed on the interval not more than five (5) years.

6. 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."

"The Provincial Head" means the Provincial Head: Northern Cape, Department of Water and Sanitation, Private Bag X6101, Kimberly, 8800.

"Extent of the water course (regulated area)" means "within the outer edge of the 1 in 100 year flood line or delineated riparian area as measured from the middle of the watercourse measured on both banks, or within a 500 m radius from the boundary of any wetland" (The boundary of a wetland is the outer edge of the seasonal or temporary zone as delineated for the wetland).

"Wetland" means land which is transitional between terrestrial and aquatic systems where the water table is usually at or near 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.

"Characteristics of a watercourse/s" mean the flow regime, water quality, habitat (including the physical structure of the watercourse/s and associated vegetation) and biota found within the extent of the watercourse/s.

"Responsible Authority" means the Department of Water and Sanitation or Catchment Management Agency.

"Report" refers to the reports entitled:

i. Groundwater Quality Motivation Report, compiled by Envirogistics, dated May 2016;
ii. Critical Evaluation of the Groundwater Quality Monitoring Network at Beeshoek Mine and the Development of Groundwater Related EMP's, compiled by Geo-Pollutions Gauteng (Pty) Ltd, dated April 2016;
iii. Integrated Water and Waste Management Plan, compiled by Envirogistics, dated 24 May 2016;
iv. Beeshoek Iron Ore Stormwater Management Plan, compiled by Storm Water Solutions (Pty) Ltd, dated May 2016;

v. Assmang Beeshoek Mine Water and Salt Balance Report, compiled by Irene Lea Environmental and Hydrogeology, dated June 2017;
vi. Updated Numerical Modeling of the Predicted Groundwater Drawdown Resulting from Mining of Village Pit at Beeshoek Iron Ore Mine for Assmang Beeshoek Iron Ore Mine, compiled by Geo-Pollution Technologies Gauteng (Pty) Ltd, dated June 2017;
vii. Waste Characterisation and Groundwater Monitoring Network Audit for Assmang Beeshoek Iron Ore Mine, compiled by Geo-Pollution Technologies Gauteng (Pty) Ltd, dated April 2017;
viii. Report on Geotechnical and founding Conditions Underlying the Site of the proposed Village Pit Stormwater Catchment Dam at Beeshoek Mine, compiled by Pronto Consulting, undated;
ix. Assmang Limited – Beeshoek Iron Ore Mine Integrated Water Use Licence and Integrated Water and waste Management Plan Report,c ompiled by Ivuzi Environmental (Pty) Ltd, dated November 2010;
x. Assmang Limited Beeshoek Iron Ore Mine Conceptual Design for fine Residue Storage Facility Report, compiled by Geotail Consultant (Pty) Ltd, dated July 2009;
xi. Public Participation Report, compiled by GCS Environmental Engineering (Pty) Ltd, dated October 2010;
xii. Hydrocensus Survey and the interpretation of data in Postmasburg Area Report, compiled by Geo-Pollution Technologies Gauteng, dated November 2010;
xiii. Numerical Modeling of the Predicted Groundwater Drawdown Resulting from Mining of the Village Pit Report, compiled by Geo-pollution Technologies (Pty) Ltd, dated 2008;
xiv. Environmental Impact Assessment and Management Programme Report, compiled by Ivuzi Environmental Consultant (Pty) Ltd, dated July 2009;
xv. Public Participation Report, compiled by Ivuzi Environmental Consultant (Pty) Ltd, dated July 2010;
xvi. Copy of Social and Labour Plan Report compiled by Ivuzi Environmental Consultant (Pty) Ltd, dated July 2010;
xvii. And As well as other related documentation and communication (email, letters and phone calls).

7. Description of the Project

The proposed project entails taking of water, storing of water, disposal of contaminated water, waste rock, ROM/plant/quartzite Stockpiles, sewage effluent, dust suppression, Jig discard dumps, dirty stormwater containment and dewatering activities for iron ore opencast mining activities on the properties mentioned in item 3. The mining activities includes opencast mining operation, which consists of six (6) opencast pits with an estimated iron ore reserve of 160 million tons, hauling of ore, crushing of ore (primary, and secondary crushing), washing and screening and other mining related activities. The water uses activities fall within D73A Quaternary Catchment in the Vaal Water Management Area.

8. Licence superseded or Replaced

8.1 This Licence supersedes or replaces water use licence granted to Assmang (Pty) Ltd: Beeshoek Iron Ore Mine, licence number: 10/D73A/ABGJ/2592, dated 01 December 2014.

APPENDIX I

General conditions for the licence

1. This licence is subject to all 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 Provincial Head of any change of name, address, premises and/or legal status.

4. If the property/ies 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 Provincial Head of the Department 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.

6. The Licensee shall be responsible for any water use charges or levies imposed by a responsible authority.

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 Provincial Head within one (1) month of finalization.

11. The Licensee shall appoint an independent external auditor to conduct a biennial audit on compliance with the conditions of this licence. The first audit must be conducted within three (3) months of the date of this licence and a report on the audit shall be submitted to the Provincial Head within one month of finalization.

12. All measuring, recording and integrating devices shall be maintained in a sound state of repair and calibrated by a competent person at intervals as specified and required according to the device specifications. The licensee must calibrate the inflow and outflow meters and these calibration certificates shall be available for inspection by the Provincial Head or Responsible Authority or his/her representative upon request. A relevant maintenance and calibration schedule should be compiled and maintained by the licensee.

13. Any incident that causes or may cause water pollution must be reported to the Provincial Head or his/her designated representative within 24 hours.

14. Licensee shall use water efficiently to minimise total water intake, void usage of water where possible, implement "good" housekeeping and operating practices, and maximise the reuse /recycle of contaminated water.

15. The licensee is exempted from the requirements of Regulation 5 of Government Notice 704 of 04 June 1999) for the construction of various safety berms around road – to be used on haul roads to regulate movement of vehicles and trucks on site; and the use of enviroberms around opencast pits were required.

16. This Licence will supersede any water use authorisation that was issued by the Department.

17. The Department accepts no liability for any damage, loss or inconvenience, of whatever nature, suffered as a result of:

    17.1 shortage of water
    17.2 inundations or flood
    17.3 siltation of the resource; and
    17.4 required reserve releases.

APPENDIX II

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

1. The Licensee is authorised to abstract a maximum quantity of five million six hundred and fifty-five thousand, three hundred and seventy-one cubic metres per annum (5 655 371 m^3/a) of water from groundwater resources for mining, processing, and domestic use as indicated in Table 2.

Table 2: Volumes of water to be abstracted from groundwater resources

Water use(s)	Purpose/Description	Property Description	Volume (m^3/a)	Co-ordinates
Abstraction of groundwater from BN pit borehole	Potable use and mining associated activities	Portion 1 of Beesthoek Farm 448	432 000 m^3/a	28° 16' 14.231"S 23° 00' 9.816"E
Abstraction of groundwater through West Pit borehole WG37	mine processing and associated activities	Portion 4 of Farm Olynfontein 475	600 000 m^3/a	28° 19' 12.560"S 22° 59' 23.724"E
Abstraction of groundwater through West Pit borehole WG35	mine processing and associated activities	Portion 4 of Farm Olynfontein 475	260 000 m^3/a	28° 19' 8.494"S 22° 59' 23.027"E
Abstraction of groundwater through West Pit borehole WG34	mine processing and associated activities	Portion 4 of Farm Olynfontein 475	130 000 m^3/a	28° 19' 04.781"S 22° 59' 20.095"E
Abstraction of groundwater through BN Pit borehole WG28	mine processing and associated activities	Portion 0 of Beesthoek Farm 448	97 474 m^3/a	28° 16' 22.155"S 22° 59' 43.749"E
Abstraction of groundwater through BN Pit borehole WG66	mine processing and associated activities	Portion 1 of Beesthoek Farm 448	194 948 m^3/a	28° 16' 11.519"S 23° 00' 03.795"E
Abstraction of groundwater through BN Pit borehole WG62	domestic use	Portion 0 of Beesthoek Farm 448	759 339 m^3/a	28° 18' 03.8"S 23° 00' 03.3"E
Abstraction at Village Pit for dewatering	some mining and reuse in the mine processing and associated activities	Portion 0 of Beesthoek Farm 448	420 000 m^3/a	28° 17' 29.13"S 22°59' 21.88"E
Abstraction of groundwater through Village Pit borehole WG12	dewatering for safe mining and reuse in the mine processing and associated	Portion 0 of Beesthoek Farm 448	343 360 m^3/a	28° 17' 42.449"S 22°59' 30.702"E

Water use(s)	Purpose/Description	Property Description	Volume (m^3/a)	Co-ordinates
	activities			
Abstraction of groundwater through Village Pit borehole WG74 (near HF pit)	domestic usage (water supply borehole)	Portion 1 of Beesthoek Farm 448	500 000 m^3/a	28^0 17' 22.85"S 23^0 00' 52.75"E
Abstraction of groundwater through borehole WG27	domestic usage (water supply borehole)	Portion 0 of Beesthoek Farm 448	18 250 m^3/a	28^0 16' 1.06"S 22^0 59' 19.60"E
Abstraction of groundwater through Village Pit borehole WG73	dewatering for safe mining and reuse in the mine processing and associated activities	Portion 0 of Beesthoek Farm 448	1 900 000 m^3/a	28^0 17' 58.41"S $22^0$59' 32.17"E

2. The quantity of water authorised to be taken in terms of this licence may not be exceeded without prior authorisation by the Minister.

3. 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.

4. The above mentioned volumes may be reduced when the licence is reviewed.

5. The Licensee must 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.

6. All water taken from the resource shall be measured as follows:

   6.1 The daily quantity of water taken must be metered or gauged and the total recorded at the last day of each month; and

   6.2 The Licensee shall keep record of all water taken and a copy of the records shall be forwarded to the Provincial Head each year with the annual water balance as well as per Condition 6.2 of Appendix IV.

7. The Licensee must establish and implement a continual process of raising awareness amongst itself, its workers and stakeholders with respect to Water Conservation and Water Demand Management initiatives.

8. The Licensee is to provide an updated service level agreement for the provision of water from Sedibeng Water Board within three (3) months of issuance of this Licence.

APPENDIX III

Section 21 (b) of the Act: Storing of water

1. STORING OF WATER

1.1 This licence authorises storing of water as indicated in Table 3.

Table 3: Section 21 (b) water use storage facilities.

Water use(s)	Purpose/Description	Property Description	Capacity (m^3) & Volume (m^3/a)	Co-ordinates
Storage of water in Airfield Tank	store water from borehole for mining related activities	Portion 0 of Beesthoek Farm 448	5 m^3 63 764 m^3/a	28^0 15' 59.1"S 22^0 59' 26.3"E
Storage of water in Dam D94	store water from borehole	Portion 0 of Beesthoek Farm 448	131 982 m^3/a 100m^3	28^0 18' 50.9"S 22^0 59' 32.4"E
Storage of water in Dam D96	store water from borehole	Portion 0 of Beesthoek Farm 448	97 474 m^3/a 16 m^3	28^0 16' 26.3"S 22^0 59' 43.6"E
Storage of water in Dam D301A	store water from Sedibeng Water Board for Mine processing and associated activities	Portion 0 of Beesthoek Farm 448	4 093 939 m^3/a 537 m^3	28^0 18' 40.7"S 23^0 00' 04.8"E
Storage of water in Dam D301B	store water for Mine processing and associated activities	Portion 0 of Beesthoek Farm 448	386 079 m^3/a 537 m^3	28^0 18' 41.6"S 23^0 00' 03.8"E
Storage of water in Dam D300	store water for Mine processing and associated activities (Dewatering/abstraction from WG34, W35 and W37)	Portion 0 of Beesthoek Farm 448	1 088 600 m^3/a 454 m^3	28^0 19' 11.2"S 23^0 59' 01.8"E
Storage of water in Dam D90	store water for re-use	Portion 0 of Beesthoek Farm 448	759 339 m^3/a 1 062 m^3	28^0 17' 59.9"S 23^0 00' 08.7"E
Storage of water in Dam D91	store water for re-use	Portion 0 of Beesthoek Farm 448	759 339 m^3/a 1 062 m^3	28^0 18' 00.5"S 23^0 00' 09.6"E
Storage of water in Dam D97	store water for Mine processing and associated activities	Portion 0 of Beesthoek Farm 448	97 474 m^3/a 28 m^3	28^0 16' 50.593"S 22^0 59' 29.297"E
Storage of water in Dam D92	store water for Mine processing and associated	Portion 0 of Beesthoek Farm 448	267 894 m^3/a 100 m^3	28^0 17' 54.3"S 22^0 59' 46.3"E

Water use(s)	Purpose/Description	Property Description	Capacity (m^3) & Volume (m^3/a)	Co-ordinates
	activities			
Storage of water in Tank 25TK02A	store water for required plant	Portion 1 of Beesthoek Farm 448	1 518 590 m^3/a 100 m^3	28^0 17' 32.47"S 23^0 00' 35.67"E
Storage of water in Tank 25TK02 B	store water for required plant	Portion 1 of Beesthoek Farm 448	1 518 590 m^3/a 100 m^3	28^0 17' 32.47"S 23^0 00' 35.67"E

1.2. The Licensee must obtain any proprietary rights or servitudes at their own cost.

1.3 The Licensee is not indemnified from any detrimental effect that the reservoir/dams/storage facilities may have on other properties and safety of the public. 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 dam(s).

1.4 The Licensee is not exempted from compliance with any applicable Dam Safety Regulations.

1.5 The Licensee must follow acceptable construction, maintenance and operational practices to ensure the consistent, effective and safe performance of the storage of water in all storage facilities.

1.6 No additional water storage facilities can be constructed on the property without prior written consent of the Minister or responsible authority.

2. Monitoring Requirements

2.1 The quantity of water stored must be recorded as at the last day of each month.

2.2 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.

2.3 The Licensee shall submit the monitoring results as stipulated in Condition 6.2 of Appendix IV.

3. Construction of Dam(s)

3.1 The as-built plans and specifications of the dam(s)/storage facilities must be submitted to the Provincial Head for his/her records.

3.2 Construction of the dam(s) may not commence before authorisation in terms of the Environment Conservation Act, 1989 (Act 73 of 1989) is issued.

3.3 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.

APPENDIX IV

Section 21 (g) of the Act: Disposing of waste in a manner which may detrimentally impact on a water resource

1. CONSTRUCTION , OPERATION AND MAINTENANCE

1.1 The Licensee must ensure that the disposal of the waste water and the operation and maintenance of the system are done according to the provisions in the Report.

1.2 The waste facilities listed in Table 4 shall be operated and maintained to have a minimum freeboard of 0.8 metres above full supply level and all other water systems related thereto shall be operated in such a manner that it is at all times capable of handling the 1:50 year flood-event on top of its mean operating level.

1.3 The Licensee must use acknowledged methods for sampling and the date,, time and sampler must be indicates for each sample.

1.4 The Licensee shall carry out and complete all the activities, including the construction and operation of the facilities listed In Table 4 and according to the final plans submitted with the Integrated Water Use Licence Application as approved by the Provincial Head.

1.5 The Licensee must ensure that the disposal of waste water, operation, and maintenance of the system are done according to the provisions in the Report.

1.6 The tailings and pollution control dams must be designed in such a manner that any spillage can be contained and reclaimed at an early stage without any impact on the surrounding environment.

2 STORAGE OF WATER CONTAINING WASTE

2.1 The Licensee is authorised to dispose of a maximum quantity in cubic metres (m3) ot tons of waste or water containing waste into the waste management facilities on the properties described in Table 4.

Table 4: Summary of section 21 (g) water uses

Water use(s)	Purpose/ Description	Property Description	Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)	Co-ordinates
Product Stockpile Area 1 & 2	Waste disposal - Product Stockpile Area 1 & 2	Portion 1 of Beesthoek Farm 448	5 998 500 t/a	28^0 16' 51.18"S 23^0 00' 03.31"E
South Detrital stockpiled Area	Waste disposal - South Detrital stockpiled Area	Portion 4 of Farm Olynfontein 475	2 240 000 t/a	28^0 19' 40.5"S 23^0 00' 50.2"E
Waste Rock Dump North/stockpiles	Waste disposal - Waste Rock Dump North/stockpiles	Portion 1 of Beesthoek Farm 448	7 000 000 tons	28^0 17' 43.93"S 23^0 00' 36.85"E

Water use(s)	Purpose/ Description	Property Description	Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)	Co-ordinates
Jig Discard Dump/Stockpiles	Waste disposal - Jig Discard Dump/Stockpiles	Portion 1 of Beesthoek Farm 448	9 000 000 tons	28° 17' 16.38"S 23° 00' 23.44"E
East Pit Waste Rock Dump stockpiles	Waste disposal - East Pit Waste Rock Dump stockpiles	Portion 4 of Farm Olynfontein 475	68 850 000 tons	28° 20' 17.916"S 23° 00' 10.965"E
South Contaminated ROM 1 Off grade waste dump 1	Waste disposal - South Contaminated ROM 1 Off grade waste dump 1	Portion 4 of Farm Olynfontein 475	4 450 000 t/a	28° 19' 1.48"S 22° 59' 57.7"E
South Contaminated ROM 2 (including BIS) – Off grade waste dump 2	Waste disposal - South Contaminated ROM 2 (including BIS) – Off grade waste dump 2	Portion 4 of Farm Olynfontein 475	1 920 000 t/a	28° 19' 17.63"S 23° 00' 08.74"E
South Off grade ROM 1 – Off grade waste dump 3	Waste disposal - South Off grade ROM 1 – Off grade waste dump 3	Portion 0 of Beesthoek Farm 448	2 508 000 t/a	28° 18' 54.49"S 23° 00' 19.72"E
Disposal of contaminated water	Disposal of contaminated water into Dam D86	Portion 1 of Beesthoek Farm 448	7 421 078 m^3/a 269 m^3	28° 17' 08.068"S 23° 00' 15.131"E
Disposal of contaminated water	Disposal of contaminated water into South Evaporation Ponds	Portion 0 of Beesthoek Farm 448	1 221 m^3/a 1 600 m^3	28° 18' 48.5"S 23° 00' 11.0"E
Village Waste Rock Dump/stockpiles	Waste disposal - Village Waste Rock Dump/stockpiles	Portion 0 of Beesthoek Farm 448	31 500 000 tons	28° 18' 21.630"S 22° 59' 26.890"E
ROM Stockpile	Waste disposal - ROM Stockpile	Portion 0 of Beesthoek Farm 448	720 000 tons	28° 18' 55.383"S 23° 00' 02.324"E
HH Pit Waste Rock Dump/ Stockpiles	Waste disposal - HH Pit Waste	Portion 1 of Beesthoek Farm	6 800 000 tons	28° 16' 47.08"S 23° 01' 21.81"E

Water use(s)	Purpose/ Description	Property Description	Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)	Co-ordinates
	Rock Dump/ Stockpiles	448		
North ROM Stockpile	Waste disposal - North ROM Stockpile	Portion 1 of Beesthoek Farm 448	1 400 000 tons	28^0 16' 39.3"S 23^0 00' 11.6"E
Disposal of contaminated water	Disposal of contaminated water into Fine Residue Dam	Portion 1 of Beesthoek Farm 448	4 864 520 m^3/a	28^0 16' 27.0"S 23^0 00' 46.0"E
Plant Stockpile	Waste disposal - Plant Stockpile	Portion 1 of Beesthoek Farm 448	300 000 tons	28^0 17' 20.9"S 22^0 59' 58.6"E
Dust suppression with dirty water	Dust Suppression of Haul roads (North – BN Truck filing point)	Portion 1 of Beesthoek Farm 448	257 518 m^3/a	Haul and main roads 28^0 16' 12.559"S 23^0 00' 10.784"E
Dust suppression with dirty water	Dust Suppression of Haul roads (South – SM filling point)	Portion 0 of Beesthoek Farm 448	211 660 m^3/a	Haul roads 28^0 18' 49.821"S 22^0 59' 54.705"E
Disposal of contaminated water	Disposal of contaminated water into Tank 26TK01A	Portion 1 of Beesthoek Farm 448	225 418 m^3/a 100m^3	28^0 16' 45.7"S 22^0 59' 56.8"E
Disposal of contaminated water	Disposal of contaminated water into Tank 26TK01B	Portion 1 of Beesthoek Farm 448	225 418 m^3/a 100m^3	28^0 16' 45.775"S 22^0 59' 56.844"E
Disposal of contaminated water	Disposal of contaminated water Thickener TH01 Dam	Portion 1 of Beesthoek Farm 448	7 522 316 m^3/a 23 000m^3	28^0 17' 14.9"S 23^0 00' 06.6"E
Disposal of contaminated water	Disposal of contaminated water into Clarifier Dam DD01	Portion 1 of Beesthoek Farm 448	6 657 912 m^3/a 2 000m^3	28^0 17' 17.194"S 23^0 00' 07.841"E
Disposal of contaminated water into Stormwater Dam North	Disposal of contaminated water into Stormwater Dam North	Portion 1 of Beesthoek Farm 448	76 700m^3/a 15 000m^3	28^0 17' 30.63"S 22^0 59' 46.48"E
Disposal of domestic	Disposal of	Portion 1 of	512.5 m^3/a	28^0 17'

Water use(s)	Purpose/ Description	Property Description	Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)	Co-ordinates
effluent into sewage sumps	domestic effluent into sewage sumps Portion 1	Beesthoek Farm 448		21.900"S 23^0 00' 8.200"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 15.200"S 23^0 00' 2.800"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 18.382"S 23^0 00' 1.296"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 25.900"S 23^0 00' 2.500"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 25.200"S 23^0 00' 01.800"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 17.000"S 22^0 59' 56.900"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 13.400"S 22^0 59' 56.900"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 14.100"S 22^0 59' 54.800"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 9.100"S 22^0 59' 56.100"E
Disposal of domestic effluent into sewage	Disposal of domestic	Portion 1 of Beesthoek Farm		28^0 17' 6.700"S 22^0 59'

Water use(s)	Purpose/ Description	Property Description	Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)	Co-ordinates
sumps	effluent into sewage sumps Portion 1	448		54.700"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28° 17' 4.000"S 22° 59' 56.100"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28° 16' 57.800"S 22° 59' 57.100"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28° 18' 30.800"S 23° 00' 22.000"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28° 17' 31.100"S 22° 59' 57.400"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28° 17' 30.879"S 22° 59' 59.288"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28° 17' 32.025"S 22° 59' 59.401"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28° 17' 34.400"S 23° 00' 2.000"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28° 17' 47.925"S 23° 00' 06.115"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into	Portion 1 of Beesthoek Farm 448		28° 17' 25.800"S 22° 59'

Water use(s)	Purpose/ Description	Property Description	Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)	Co-ordinates
	sewage sumps Portion 1			48.600"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 17.200"S 22^0 59' 45.600"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 16.800"S 22^0 59' 46.600"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 16.600"S 22^0 59' 46.800"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 28.600"S 22^0 59' 54.900"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Beesthoek Farm 448 Portion 1		28^0 17' 26.200"S 22^0 59' 53.600"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 32.400"S 22^0 59' 52.800"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 16' 59.500"S 22^0 59' 40.100"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Security building Village	Portion 1 of Beesthoek Farm 448		28^0 17' 29"S 22^0 59' 52"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into	Portion 1 of Beesthoek Farm 448		28^0 16' 36.50"S 22^0 59' 48.43"E

Water use(s)	Purpose/ Description	Property Description	Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)	Co-ordinates
	sewage sumps at Road Transport 2			
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Re	Portion 1 of Beesthoek Farm 448	498.5m^3/a	28^0 17' 20.659"S 23^0 00' 6.814"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Re	Portion 0 of Beesthoek Farm 448		28^0 18' 29.716"S 23^0 00' 14.846"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Re	Portion 0 of Beesthoek Farm 448		28^0 18' 34.000"S 23^0 00' 18.500"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Re	Portion 0 of Beesthoek Farm 448		28^0 18' 39.600"S 23^0 00' 17.400"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Re	Portion 0 of Beesthoek Farm 448		28^0 18' 42.900"S 23^0 00' 16.500"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Re	Portion 0 of Beesthoek Farm 448		28^0 18' 46.200"S 22^0 59' 59.300"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Re	Portion 0 of Beesthoek Farm 448		28^0 15' 59.800"S 22^0 59' 25.800"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Re	Portion 0 of Beesthoek Farm 448		28^0 15' 58.800"S 22^0 59' 26.800"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into	Portion 0 of Beesthoek Farm 448		28^0 16' 46.700"S 22^0 59'

Water use(s)	Purpose/ Description	Property Description	Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)	Co-ordinates
	sewage sumps Re			40.100"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps at Road Transport 1	Portion 0 of Beesthoek Farm 448		28^0 16' 34.61"S 22^0 59' 44.00"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps at Road Transport 3	Portion 0 of Beesthoek Farm 448		28^0 16' 36.06"S 22^0 59' 46.43"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps at Long distance parking	Portion 0 of Beesthoek Farm 448		28^0 16' 46.00"S 22^0 59' 39.00"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Conservancy Tank at South Change House	Portion 0 of Beesthoek Farm 448		28^0 18' 34.00"S 23^{0}00' 15.00"E
Backfilling of BN opencast pit using Waste Dump Rock Materials	Disposal of waste - Backfilling of BN opencast pit using Waste Dump Rock Materials	Portion 1 of Beesthoek Farm 448	1 625 221 t/a	28^0 16' 13.9"S 23^0 00' 17.2"E
Backfilling of East Pit using Waste Dump Rock Materials	Disposal of waste - Backfilling of East Pit using Waste Dump Rock Materials	Portion 4 of Farm Olynfontein 475	2 119 897 t/a	28^0 20' 31.2"S 22^0 59' 37.7"E
Backfilling of GK opencast pit using Waste Dump Rock Materials	Disposal of waste - Backfilling of GK opencast pit using Waste	Portion 1 of Beesthoek Farm 448	1 468 839 t/a	28^0 18' 23.4"S 23^0 01' 09.6"E

Water use(s)	Purpose/ Description	Property Description	Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)	Co-ordinates
	Dump Rock Materials			
Backfilling of opencast HH Pit using Waste Dump Rock Materials	Disposal of waste - Backfilling of opencast HH Pit using Waste Dump Rock Materials	Portion 1 of Beesthoek Farm 448	459 860 t/a	28^0 16' 43.7"S 23^0 01' 20.2"E
Backfilling of HL Opencast Pit using Waste Dump Rock Materials	Disposal of waste - Backfilling of HL Opencast Pit using Waste Dump Rock Materials	Portion 1 of Beesthoek Farm 448	2 212 010 t/a	28^0 17' 21.6"S 23^0 00' 55.6"E
Backfilling of Detrital area opencast pit using Waste Dump Rock Materials	Disposal of waste - Backfilling of Detrital area opencast pit using Waste Dump Rock Materials	Portion 4 of Farm Olynfontein 475	1 224 840 t/a	28^0 19' 40.3"S 23^0 00' 29.8"E
Backfilling of West opencast Pit using Waste Dump Rock Materials	Disposal of waste - Backfilling of West opencast Pit using Waste Dump Rock Materials	Portion 4 of Farm Olynfontein 475	10 536 114 t/a	28^0 19' 18.6"S 22^0 59' 30.8"E
South ROM Stockpile 2	Disposal of waste - South ROM Stockpile 2	Portion 4 of Farm Olynfontein 475	1 000 000tons	28^0 18' 54.900"S 22^{0}59' 25.880"E
S Offgrade ROM 2	Disposal of waste - S Offgrade ROM 2	Portion 0 of Beesthoek Farm 448	1 000 000tons	28^0 18' 40.230"S 22^{0}59' 48.080"E
N Offgrade ROM 1	Disposal of waste - N Offgrade ROM 1	Portion 1 of Beesthoek Farm 448	1 000 000tons	28^0 17' 33.46"S 23^{0}00' 22.67"E
BIS ROM North 1– Stockpiles being reworked further	Disposal of waste - BIS ROM North 1–	Portion 1 of Beesthoek Farm 448	2 950 000 tons (current capacity, no new	28^0 17' 40.35"S 23^{0}00' 53.51"E

Water use(s)	Purpose/ Description	Property Description	Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)	Co-ordinates
	Stockpiles being reworked further		depositions)	
BIS ROM North 2– Stockpiles	Disposal of waste - BIS ROM North 2– Stockpiles	Portion 1 of Beesthoek Farm 448	3 150 000 tons	28^0 16' 57.23"S 23^{0}01' 05.97"E
Shale Stockpiles being reworked further	Disposal of waste - Shale Stockpiles being reworked further	Portion 1 of Beesthoek Farm 448	361 633 tons (current capacity, no new depositions)	28^0 16' 34.66"S 23^{0}00' 04.95"E
Quartzite Stockpiles being reworked further	Disposal of waste - Quartzite Stockpiles being reworked further	Portion 1 of Beesthoek Farm 448	1 668 163 tons (current capacity, no new depositions)	28^0 16' 46.03"S 23^{0}00' 12.39"E
West Pit Waste Rock Dump/stockpiles	Disposal of waste - West Plt Waste Rock Dump/stockpiles	Portion 4 of Farm Olynfontein 475	21 413 403 tons	28^0 19' 25.69"S 22^{0}59' 46.02"E
HL Waste Rock Dump/stockpiles	Disposal of waste - HL Waste Rock Dump/stockpiles	Portion 1 of Beesthoek Farm 448	10 983 334 tons	28^0 17' 07.01"S 23^{0}01' 08.32"E
GF Waste Rock Dump/stockpiles	Disposal of waste - GF Waste Rock Dump/stockpiles	Portion 1 of Beesthoek Farm 448	7 721 766 tons	28^0 17' 3.12"S 23^{0}00' 38.58"E
Landfill site	Landfill site	Portion 0 of Beesthoek farm 448	500 000 tons	28^0 16' 39.725"S 22^{0}59' 40.088"E

3. MONITORING

3.1 The Licensee shall monitor on monthly basis the water resources at groundwater and surface water monitoring points to determine the impact of the facility and other mining activities on the water quality by taking samples at the monitoring points as indicated in the Reports.

3.2 The date, time and monitoring point in respect of each sample taken shall be recorded together with the results of the analysis.

3.3 Monitoring points shall not be changed prior to notification to and written approval by the Provincial Head.

3.4 For boreholes already impacted upon, the Licensee must inform the water user of the danger of using that water and supply water of acceptable quality to their intended use.

3.5 Analysis shall be carried out in accordance with methods prescribed by and obtainable from the South African National Standards (SANS), in terms of the Standards Act, 1982 (Act 30 of 1982). The method of analysis must not change without prior notification to and approval from the Responsible Authority.

3.6 Abstraction of groundwater must be monitored on a monthly basis. The installation of water meters must be at the expense of the Licensee and must comply with the specifications of the owner and should be SANS approved. The meters must reach 999 999m^3 before being reset to 0m^3.

3.7 Groundwater Levels must be monitored around the areas where abstraction and dewatering takes place around open pit area monthly for the duration of the mine operations.

3.8 The impacts of dewatering must be quantified and monitored over time at point of potential impacts. The impacts identified along with mitigation measure (and progress on implementation of mitigation measures) needs to be provided to the Department along with the monitoring results on a quarterly basis.

3.9 In the event where legitimate groundwater users water requirements are compromised by dewatering activities, the licensee must provide a platform for a negotiated solution between the affected parties.

3.10 Records of all monitoring data must submit to the Provincial Head as part of annual monitoring report in Condition 6.2 of Appendix IV.

3.11 Groundwater quality must be monitored on quarterly basis at all relevant boreholes identified in the Report.

3.12 The Licensee must install monitoring boreholes downstream of the operation, no further than 50m from potential hydrocarbon contamination sources (and any other potential hazardous material sources) such as (but not limited to) fuel tanks, dispenser, refuelling points of machinery, etc. This should be performed to monitor spillages and leaks.

3.13 A monitoring program must be developed that will ensure any plume that may arise from any of the existing unlined waste containing facilities is detected early must be implemented and such monitoring plan must be approved by the geohydrology specialist of the Department.

3.14 Should a plume be detected from any of the existing unlined facilities, the applicant must submit to the Department within 30 days of such detection, a remedial action plan that will also detail how the occurrence of such pollution in future will be prevented

3.15 As the Village Pit will drawdown mostly towards the southwest area and a few meters to a south eastern direction, additional boreholes at these position need to be identified or drilled for monitoring points;

3.16 A groundwater Monitoring Programme must be extended from the current monitoring programme done by the Mine. This means that the network should be extended over time to accommodate the migration of contaminants through the aquifer, extension of the cone of depression (water level monitoring) as well as the expansion of infrastructure and/or addition of possible pollution sources. An audit on the monitoring network should be conducted annually. The monitoring network programme should be in place and monitoring results must be submitted quarterly to the Department. Groundwater Quality Parameters such as pH, EC, Na, K, Al, Fe, Mg, Fe, Zn, Alkalinity, NO_3, SO_4, Fl and Cl.

3.17 A groundwater risk assessment using available information shall be done on all waste handling facilities.There should be at least 1 to a maximum of 5 monitoring boreholes, 10-50 meters downstream of waste disposal facility, 2 to a maximum of 5 at 50 to 500 meters of Ore discards and 1 to 6 boreholes in Mine impounded areas.

3.18 The Licensee is to conduct a geohydrological assessment to ascertain the natural groundwater quality in terms of Nitrates, Barium and Manganese as these have been identified as constituents of concern. The cumulative impacts of such shall also be determined and mitigation measures proposed. This shall be finalised and submitted to the Department for approval within six (6) of licence issuance.

3.19 Groundwater model must be calibrated as more information becomes available. This will add significant value in terms of groundwater management and better understanding of the aquifer behaviour. The model shall be updated on a biennial basis and submitted to the Department on a biennial basis.

4. INCIDENT MONITORING

4.1 Emergency incidents must be dealt with in accordance with the requirements as stipulated in Appendix I

4.2 In the event that the emergency incident results in pollution of water resource, the Licensee must monitor the water quality and the incident report must be submitted to the Provincial Head within fourteen (14) days.

5. WATER RESOURCE PROTECTION

5.1 The impact of the activities of the mine waste water quality containment facilities shall not exceed the groundwater quality chemistry detailed in Table 5 in the water quality Reserve for the area.

Table 5: General Chemistry of the Water Resource

Chemical Parameter	Target Water Quality Ranges	
	Units	Class II
pH		4 – 5 & >9.5 - 10
Electric Conductivity	mS/m	150 - 370
Total Dissolved Solids	mg/l	1000-2450
Calcium as Ca	mg/l	150 - 300
Magnesium as Mg	mg/l	70 - 100
Sodium as Na	mg/l	200 - 400
Chloride as Cl	mg/l	200 - 600
Sulphate as SO4	mg/l	400 - 600
Nitrate as NO_XN	mg/l	10 - 20

Chemical Parameter	Target Water Quality Ranges	
	Units	Class II
Fluoride as F	mg/l	1.5 – 3.5
Faecal coliforms	Counts/100ml	1 - 10

5.2 It is evident from the report that the mine is situated in a dolomitic area. Dolomite aquifers are known to be highly vulnerable to pollution and difficult to remediate. There is possibility of sinkholes and cavities development, therefore; dolomite instability must be investigated and a dolomite risk management plan must be established within one (1) year of issuance of this licence.

6. REPORTING

6.1 The Licensee shall update the water and salt 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.

6.2 The Licensee shall compile an Annual Monitoring Report and submit it to the Provincial Head within eighteen (18) months after issuance of this licence and annually thereafter under Reference number 27/2/2/D173/6/1. This must be accompanied by the interpretation of results of analysis.

7. STORM WATER MANAGEMENT

7.1 Stormwater leaving the Licensee's 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.

7.2 Increase runoff due to vegetation clearance and/or soil compaction must be managed, and steps must be taken to ensure that stormwater does not lead to bank instability and excessive levels of silt entering the stream.

7.3 Stormwater shall be diverted from the mine complex site and roads and shall be managed in such a manner as to disperse runoff and concentrating the stormwater flow.

7.4 Where necessary, works must be constructed to attenuate the velocity of any stormwater discharge and to protect the banks of the affected watercourses.

7.5 Stormwater control works must be constructed, operated and maintained in a sustainable manner throughout the impacted area.

7.6 All stormwater that would naturally run across the pollution areas shall be diverted via channels and trapezoidal drains designed to contain the 1:50 year flood.

7.7 The polluted stormwater system shall be designed and implemented to provide suitable routing and pumping capacity for contaminated stormwater from the individual facilities to the respective stormwater dams in accordance with the design specifications as contained in the Integrated Water Use License Application Report.

7.8 The polluted stormwater captured in the stormwater control dams shall be pumped to the process water treatment plant for re-use and recycling.

8. PLANT AREAS AND CONVEYANCES

8.1 Pollution caused by spills from the conveyances must be prevented through proper maintenance and effective protective measures especially near all stream crossings.

8.2 All reagent storage tanks and reaction units must be supplied with a bunded area built to the capacity of the facility and provided with sumps and pumps to return the spilled material back into the system. The system shall be maintained in a state of good repair and standby pumps must be provided.

8.3 Any hazardous substances must be handled according to the relevant legislation relating to the transport, storage and use of the substance.

8.4 Any access roads or temporary crossings must be:

8.4.1 Non-erosive, structurally stable and shall not induce any flooding or safety hazard and
8.4.2 Be repaired immediately to prevent further damage.

9. ACCESS CONTROL

9.1 Strict access procedures must be followed in order to gain access to the property.

9.2 Access to the pollution control dams, waste rock dumps, bio-remediation facility, stormwater dam and return water dam (including all waste management facilities listed in Table 4) must be limited to authorised employees of the Licensee and their contractors only.

9.3 Notices prohibiting unauthorised persons from entering the controlled access areas as well as internationally acceptable signs indicating the risks involved in case of an unauthorised entry must be displayed along the boundary fence of these areas.

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 Provincial Head 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).
10.1.5 Other causes.

10.2 The Licensee must, within 24 hours, notify the Provincial Head 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 Regional

Head, 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 Provincial Head of measures taken to:

10.3.1 Correct the impacts resulting from the incident.
10.3.2 Prevent the incident from causing any further impacts.
10.3.3 Prevent a recurrence of a similar incident.

11 INTEGRATED WATER AND WASTE MANAGEMENT

11.1 Integrated Water and Waste Management Plan (IWWMP) and Rehabilitation Strategy and Implementation Programme (RSIP) shall be updated and submitted to the Provincial Head for approval, annually.

11.2 The Licensee must, at least 180 days prior to the intended closure of any facility, or any portion thereof, notify the Provincial Head of such intention and submit any final amendments of the IWWMP and RSIP as well as a final Closure Plan, for approval.

11.3 The Licensee shall make full financial provision for all investigations, designs, construction, operation and maintenance for a water treatment plant should it become a requirement as a long-term water management strategy.

12. WATER CONSERVATION AND DEMAND MANAGEMENT (WC/WDM)

12.1 Licensee shall develop and submit a water conservation and demand management (WC/WDM) plan to the Provincial Head, which

12.1.1 quantify the water use efficiency of the activity;
12.1.2 contains the mine water management and water loss strategies and programmes;
12.1.3 sets annual targets for improved water use efficiency for the mining activity, beneficiation and waste disposal practices and stipulates which measures will be implemented to achieve the targets on the mine;

12.2 Licensee shall update the WC/WDM plan on an annually basis and submit to the Provincial Head for approval.

12.3 Licensee shall report on annually basis the implementation of water conservation and water demand management measures including retrofitting with water efficient technologies and devices, reduction of total water demand, improvement in water use efficiency benchmarks and targets.

APPENDIX V

Section 21 (j) of the Act: **Removing, discharging or disposing of water found underground if it is necessary for the continuation of an activity or for safety of people.**

1. REMOVING WATER FOUND UNDERGROUND

1.1 The Licensee is authorised to remove a total volume of three million two hundred and ninety thousand three hundred and eight cubic metres per annum (3 290 308 m^3/a) of water found underground from the various boreholes and open pits as indicated in Table 6.

Table 6: Summary of section 21 (j) water uses

Water use(s)	Purpose/Description	Property Description	Volume (m^3/a)	Co-ordinates
Dewatering from BN Pit	Safe continuation of mining activities	Portion 1 of the Farm Beesthoek 448	432 000 m^3/a	28^0 16' 14.231"S 23^0 00' 9.816"E
Abstraction of groundwater through BN Pit borehole WG66 for	mine processing and associated activities (Safe continuation of mining activities)	Portion 1 of Beesthoek Farm 448	194 948 m^3/a	28^0 16' 11.519"S 23^0 00' 03.795"E
In –pit dewatering at Village Pit	mine processing and associated activities (Safe continuation of mining activities)	Portion 0 of Beesthoek Farm 448	420 000 m^3/a	28^0 17' 29.13"S 22^{0}59' 21.88"E
Abstraction of groundwater through Village Pit borehole WG12	dewatering purposes (Safe continuation of mining activities)	Portion 0 of Beesthoek Farm 448	343 360 m^3/a	28^0 17' 42.449"S 22^0 59' 30.702"E
Village pit dewatering from borehole WG73	Safe continuation of mining activities	Portion 0 of Beesthoek Farm 448	1 900 000 m^3/a	28^0 17' 58.41"S 22^0 59' 32.17"E

1.2 The Licensee must provide any water user whose water supply is impacted by the water use with domestic water.

1.3 The quantity of water removed underground must be metered and recorded on a daily basis.

1.4 The groundwater levels shall be monitored every month and reports submitted on a quarterly basis.]

1.5 No more water shall be removed for dewatering than the minimum required for effective dewatering.

1.6 Self registering flow metres must be installed in the delivery lines at easily accessible positions near the points of abstraction/dewatering.

1.7 The Licensee must routinely check if the pumps are in a working order. A contingency plan should be in place in cases of failure of pumps.

1.8 The Responsible Authority must be informed of any incident that may lead to groundwater being disposed of contrary to the provisions of this Licence, by submitting a report containing the following information:

1.8.1 Nature of incident (e.g. operating malfunctions, mechanical failures, environmental factors, loss of supply services, etc)
1.8.2 Actions taken to rectify the situation and to prevent pollution or any other damage to the environment and
1.8.3 Measures to be taken to prevent re-occurrence of any similar incident.

1.9 The Licensee must follow acceptable construction, maintenance and operational practices to ensure the consistent, effective and safe performance of the groundwater removal system.

1.10 Reasonable measure must be taken to provide for mechanical, electrical or operation failures and malfunctions of the underground water removal system.

[END OF LICENCE]

mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

Private Bag X6093, Kimberley, 8300,
Tel: (053) 807 1700, Fax: (053) 832 5631
First Floor. Liberty Corner, 29-31 Currey Street, Kimberley 8301

From: Directorate Mineral Regulation: Northern Cape
Enquiries: Ms T.L Tshikororo **E-Mail**:Tshisikhawe.Tshikororo@dmr.gov.za
Sub Directorate: Mine Environmental Management **Ref:** NC30/5/1/2/3/2/1/223 EM

REGISTERED MAIL

The Director
Beeshoek Iron Ore Mine
P.O Mancorp Mine
South Africa
8423

Attention: WILLEM STEPHANUS GROBBELAAR

APPROVAL OF AN ENVIRONMENTAL MANAGEMENT PROGRAMME IN TERMS OF SECTION 39 (4) (A) (I – III) OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT 28 OF 2002) FOR MINING RIGHT IN RESPECT IRON ORE ON REMAINING EXTENT AND PORTION 1 BEESHOEK NO. 448 AND REMAINING EXTENT OF THE FARM OLYNFONTEIN NO. 475 (CURRENTLY CONSOLIDATED AS PORTIONS 2, 3 AND REMAINDER OF PORTION 4 OF THE FARM OLYNFONTEIN NO. 475 AND REMAINDER, REMAINDER OF PORTION 1, PORTION 2, 3, 4, 5 AND 6, REMAINDER OF PORTION 7, PORTIONS 8, 9, 10, 11 AND 12 OF THE FARM BEESHOEK NO. 448) SITUATED IN THE MAGISTERIAL DISTRICT OF HAY: NORTHERN CAPE PROVINCE BY ASSMANG LIMITED.

Please find your approved Environmental Management Plan for your attention and appropriate action. Kindly note that the Environmental Management Plan stipulates Environmental Management and has been approved under the following conditions:

1. This approval doesn't purport to absolve **Assmang Limited** (the company) from their common law obligations towards the owner(s) of the surface of land affected.

2. Mining activities must conform to all legislation and such other conditions as may be imposed by the Regional Manager or any other official of this office, duly authorized thereto.

3. Environmental management must conform to the Environmental Management Programme as approved.

4. The company is responsible for all surface disturbances on the mining area, which includes all historical surface disturbances.

5. The financial provision provided in terms of section 41 and Regulation 53 of the Act must be annually reviewed and adjusted (Regulation 54 (2) refers) to conform to the above-mentioned mining activities.

6. Note that a copy of the approved Environmental Management Programme must always be available on the mining site for inspection by duly authorized officers.

7. No mining waste will be allowed to be deposited in a natural drainage lines, erosion gullies and or dongas, unless agreed thereto in writing with the Regional Manager.

8. Performance assessment report as contemplated in regulation 55 (1) (c) must be submitted bi-annually (from the date on which the permit was granted) to the Regional Manager: Mineral Regulation.

9. The approved Environmental Management Programme that is attached is for implementation and compliance to the conditions stipulated therein.

10. This approval provides no relief from the provisions of any other relevant statutory or contractual obligations.

Regards,

.....

P SWART

REGIONAL MANAGER

NORTHERN CAPE REGION

DATE: 7/6/2010

environment & tourism

Department:
Environmental Affairs and Tourism
REPUBLIC OF SOUTH AFRICA

Ref: 12/9/11

Enquiries: Ms K. Ntoampe

Tel. 012 310 3920 **Fax:** 012 310 3753 **Email Address**: kntoampe@deat.gov.za
www.deat.gov.za

Mr Dirk Coetzee
Assmang Limited
P. O. Box 732
POSTMASBURG
8420

Fax: 053 311 4310

Dear Permit Holder

PERMIT IN TERMS OF SECTION 20 OF THE ENVIRONMENT CONSERVATION ACT, 1989 (ACT NO. 73 OF 1989)

Please find hereto attached a permit issued in terms of S.20 of the ECA (ACT 73 OF 1989) (as amended)
Please be advised that future permit amendment applications should be addressed to:

The Director: Authorisations and Waste Disposal Management
Department of Environmental Affairs and Tourism
Private Bag X447
Pretoria
0001

This is also to advise you that applications for authorization of permit amendment, exemptions, waste delisting, emergency and or once off authorizations will be processed only if the Department of Environmental Affairs and Tourism (DEAT) is in receipt of the latest external audit report, Annexure III of the permit or any other documents specified in the permit/ authorisation that needs to be submitted to DEAT/DWAF annually or at frequencies stipulated in the permit.

Furthermore, please note that due to the permitting process being handled by two departments, the **minimum** time for processing any application regardless of details required is four and half months. You are therefore advised to apply well in advance.

Yours Sincerely

Ms Nosipho Ngcaba
Director-General
Letter signed by Ms Kelello Ntoampe
Designation: Director: Authorisations and Waste Disposal Management
Date: 30 | 10 | 2008

environment & tourism
Department:
Environmental Affairs and Tourism
REPUBLIC OF SOUTH AFRICA

Private Bag X447, Pretoria, 0001 • Fedsure Building, 315 Pretorius Street, Pretoria, 0002. Tel: (+27 12) 310 3911 Fax: (+27 12) 322 2682

Ref. 12/9/11/P49
Enquiries: Ms K Ntoampe
Tel: (012) 310-3920 **Fax:** (012) 320-3753 **Email:** kntoampe@deat.gov.za
www.deat.gov.za

PERMIT NUMBER:	12/9/11/P49
CLASS:	G:C:B-
WASTE DISPOSAL SITE:	BEESHOEK DOMESTIC WASTE SITE
LOCATION:	THE FARM BEESTHOEK NUMBER 448, DISTRICT OF POSTMASBURG
PERMIT HOLDER:	ASSMANG LIMITED
ADDRESS:	P.O. MANCORP MINES, BEESHOEK, NORTHERN CAPE, 8423

PERMIT IN TERMS OF SECTION 20 OF THE ENVIRONMENT CONSERVATION ACT, 1989 (ACT NO. 73 OF 1989) AS AMENDED

I, Nosipho Ngcaba, in my capacity as Director-General of the National Department of Environmental Affairs and Tourism (hereinafter referred to as "the Department"), in terms of section 20(1) of the Environment Conservation Act, 1989 (Act No. 73 of 1989) (as amended), hereby authorise the abovementioned Permit Holder to establish and operate the abovementioned waste disposal site, subject to the conditions specified herein.

PERMIT CONDITIONS

In this permit, Director means the Director: Authorisations and Waste Disposal Management of the National Department of Environmental Affairs and Tourism who may be contacted at the address below:

Director: Authorisations and Waste Disposal Management
Department of Environmental Affairs and Tourism
Private Bag X447
PRETORIA
0001

In this Permit, "Regional Director" means the Regional Director: Northern Cape of the Department of Water Affairs and Forestry who may be contacted at the address below:

Regional Director: Northern Cape
Department of Water Affairs and Forestry
Private Bag X 6101
KIMBERLEY
8300

1 SITE DETAILS

1.1 LOCATION

1.1.1 This permit authorises the operation of a waste disposal site situated on farm Beeshoek number 448, District of Postmasburg, Northern Cape. (hereinafter referred to as "the Site") according to the Application Report compiled by African Water, Environmental and Mining Solutions, dated May 2004 (hereinafter referred to as " the Report"), submitted by the Permit Holder.

1.1.2 The location of the site shall be according to the co-ordinates indicated on the permit application form submitted by the permit holder which is defined as follows:

Number of corner	Latitude	Longitude
A	28° 16' 34.0"	22° 59' 39.9"
B	28° 16' 34.7"	22° 59' 41.8"
C	28° 16' 36.8"	22° 59' 42.5"
D	28° 16' 38.7"	22° 59' 43.9"
E	28° 16' 41.3"	22° 59' 43.9"
F	28° 16' 40.9"	22° 59' 40.9"
G	28° 16' 38.4"	22° 59' 40.3"
H	28° 16' 35.9"	22° 59' 38.9"

1.2 DOCUMENTS CONSIDERED

(a) The Application report prepared by African water, Environment and Mining Solutions dated May 2004 "hereinafter referred to as "the Report";

(b) An Environmental Impact Assessment (EIA) Record of Decision (RoD), issued by Northern Cape Department of Tourism, Environment and Conservation dated 10 March 2006; and

(c) The RoD issued by the Department of Water Affairs and Forestry dated 13 March 2007.

1.3 SITE SECURITY AND ACCESS CONTROL

1.3.1 The permit holder must prevent unauthorised access to the site, as far as practicable. The site must be fenced with a 1.8 fence, with gates of the same height at all entrances, to reasonably prevent unauthorised entry and curtail the spreading of wind-blown waste.

1.3.2 The permit holder must ensure that all entrance gates are manned during the hours of operation and locked outside the hours of operation.

1.3.3 The permit holder must prevent the acceptance of waste not authorised at the site as per condition 3.1 below.

1.3.4 Acceptance of waste may only take place between 06h00 and 18h00, Monday to Friday, and 08h00 and 14h00, Weekends and Public Holidays.

1.3.5 Weatherproof, durable and legible notices in at least three official languages applicable in the area, shall be displayed at each entrance to the site. These notices shall prohibit unauthorised entry and state the hours of operation, the name, address and telephone number of the permit holder and the person responsible for the operation of the site

2 MANAGEMENT

2.1 GENERAL MANAGEMENT

2.1.1 The activities must be managed and operated:

(a) in accordance with a documented management system and or an environmental management plan as per the EIA RoD, which identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents and non-conformances and those drawn to the attention of the permit holder as a result of complaints; and

(b) by sufficient persons who are competent in respect of the responsibilities to be undertaken by them in connection with the operation of the activities.

2.1.2 Records demonstrating compliance with condition 2.1.1 must be maintained.

2.1.3 Any persons having duties that are or may be affected by the matters set out in this permit must have convenient access to a copy that must be kept at or near the place where those duties are carried out.

2.2 EMERGENCY PREPAREDNESS PLAN

2.2.1 The permit holder must maintain and implement an emergency preparedness plan and review it after each emergency and or major accident. The plan must among others include:

a) Vehicle/Machinery Fire & Malfunction
b) Landfill site fire
c) Spillage on route
d) Slope Failure
e) Natural disasters such as floods

3. PERMISSIBLE WASTE

3.1 Any portion of the site which has been constructed or developed according to condition 4 of this permit, may be used for the disposal of garden waste and uncontaminated rubble only

3.2 Any other inert waste may be disposed after approval by the Director.

4. CONSTRUCTION

4.1 GENERAL CONSTRUCTION REQUREMENTS

4.1.1 The site or any portion thereof may only be used for the disposal of permissible waste if the site or any such portion has been constructed or developed according to the condition listed under condition 4 of this permit.

4.1.2 Construction and further development within the site shall be carried out under the supervision of a registered professional engineer and according to the "Minimum Requirements series".

4.1.3 Works shall be constructed and maintained on a continuous basis by the permit holder to divert and drain from the site all runoff water arising on land adjacent to the Site, which could be expected as a result of the estimated maximum precipitation during a period of 24 hours with an average frequency of once in fifty years (50) (hereinafter referred to as the "estimated maximum precipitation"). Such works shall, under the said rainfall event, maintain a freeboard of half a meter.

4.1.4 Works shall be constructed and maintained on a continuous basis by the permit holder to divert and drain from the working face of the Site, all runoff water arising from the site, which could be expected as a result of the estimated maximum precipitation and to prevent such runoff water from coming into contact with leachate from the site. Such works shall, under the said rainfall event, maintain a freeboard of half a metre.

4.1.5 The Permit Holder shall take all reasonable steps, such as suitable zoning and/or written agreements with adjacent landowners, to establish and maintain an unbuilt area or "buffer zone" of 200 metres between the Site and the nearest residential area and/or light industrial areas during the operative life of the Site. Heavy industries or industries which may cause nuisance conditions may be permitted within the buffer zone in terms of the applicable legislation.

4.1.6 The maximum height of the site above ground level shall not exceed 3 metres.

4.1.7 The permit holder must construct berms at the highest point of the disposal site to prevent storm water from coming into contact with waste.

4.1.8 Upgrading and or modification of the facility in terms of waste storage, treatment and handling should be communicated to the Director.

4.1.9 The permit holder shall make provision for sanitation facilities on site in line with the Occupational Health and Safety Act, 1993 (Act 85 of 1993).

5. GENERAL IMPACT MANAGEMENT AND OPERATION

5.1 IMPACT MANAGEMENT

5.1.1 Waste disposal and operation shall be done according to the relevant minimum requirements (where applicable), conditions of this Permit and any other written instruction by the Director in consultation with the Regional Director.

5.1.2 Waste types other than uncontaminated rubble and garden waste must be redirected to a waste disposal site permitted for these waste types and classes.

5.1.3 No heavy machinery must be in operation on the site between 17H00 in the evening and 06H00 the next morning.

5.1.4 The permit holder shall take reasonable steps to ensure that the site is operated in such a manner that nuisance conditions or health hazards, or the potential creation of nuisance conditions or health hazards, are prevented.

5.1.5 The permit holder shall take all reasonable steps to ensure the health and safety of workers and employees on site, in terms of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).

5.1.6 Waste deposited on the site may not be allowed to burn and suitable measures shall be implemented to prevent fires on the site or extinguish fires which may occur.

5.2 OPERATION

5.2.1. Permit Holder must ensure that emissions from the activities shall be free from odour at levels likely to cause annoyance outside the site, as perceived by an authorised officer of the Department, residents and or interested and affected parties.

5.2.7 Permit Holder must ensure that emissions from the activities shall be free from noise at levels likely to cause annoyance or cause harm to interested and affected parties.

6. MONITORING

6.1 MONITORING METHODS AND PARAMETERS

6.1.1 The permit holder must carry out all tests required in terms of this permit in accordance with methods prescribed by and obtainable from the South African Bureau of Standards (SABS), referred to in the Standards Act, 1982 (Act 30 of 1982).

6.2 WATER MONITORING

6.2.1 The permit holder must establish and maintain one borehole upstream and downstream of the site for the shallow aquifers within 6 months from the date of this permit.

6.2.2 Monitoring boreholes must be equipped with lockable caps. The Department and the DWAF reserves the right to take water samples at any time and to analyse these samples or have them analysed.

6.3 BACKGROUND MONITORING

6.3.1 Samples from the upstream borehole where the ground water in the borehole is at an expected higher hydraulic pressure level of the groundwater under the site must be considered as background monitoring. Background groundwater monitoring must be conducted on a six monthly basis during each monitoring occasion for water quality variables listed in Annexure I.

6.4 DETECTION MONITORING

6.4.1 Monitoring must be conducted six monthly at the downstream borehole for the water quality variables listed in Annexure II.

7 INVESTIGATIONS

7.1 If, in the opinion of the Director, environmental pollution, nuisances or health risks may be or is occurring on the site, the permit holder must initiate an investigation into the cause of the problem or suspected problem. Such investigation must include monitoring of the relevant environmental pollution; nuisance; health risk variables and water quality variables, at those monitoring points and such frequency as may be specified by the Director

7.2 Should the investigation carried out as per conditions 7.1 above reveal any unacceptable levels of pollution, the permit holder must submit mitigation measures to the satisfaction of the Director.

8. AUDITING

8.1 INTERNAL AUDITS

8.1.1 Internal audits must be conducted annually by the permit holder and on each audit occasion an official report must be compiled by the relevant auditor to report the findings of the audits, which must be made available to the external auditor specified in condition 8.2.1.

8.2 EXTERNAL AUDITS

8.2.1 The permit holder must appoint an independent external auditor to audit the site biennially and this auditor must compile an audit report documenting the findings of his/her audit, which must be submitted by the permit holder according to condition 9.9.

8.2.2 The audit report must:

a) specifically state whether conditions of this permit are adhered to.

b) include an interpretation of all available data and test results regarding the operation of the site and all its impacts on the environment.

c) Specify target dates for the implementation of the recommendations by the permit holder to achieve compliance.

d) contain recommendations regarding non-compliance or potential non-compliance and must specify target dates for the implementation of the recommendations by the permit holder and whether corrective action taken for the previous audit non conformities was adequate.

e) show monitoring results graphically and conduct trend analysis

8.3 DEPARTMENTAL AUDITS AND INSPECTIONS

8.3.1 The Department reserves the right to audit or inspect the site without prior notification at any time and frequency as may be determined by the Director.

8.3.2 The permit holder must make any records or documentation available to the Director upon request, as well as any other information he/she may require.

8.3.3 The findings of these audits or inspections must be made available to the permit holder within 30 days of the end of the audit or inspection. Information from the audits must be treated in accordance with the Promotion of Access to Information Act, 2000 (Act 2 of 2000).

9. REPORTING

9.1 The permit holder must, within 24 hours notify the Director and the Regional Director of the occurrence or detection of any incident on the site, or incidental to the operation of the site, which has the potential to cause, or has caused pollution of the environment, health risks, nuisance conditions or water pollution.

9.2 The permit holder must, within 14 days, or a shorter period of time, if specified by the Director and/or the Regional Director, from the occurrence or detection of any incident referred to in condition 9.1, submit an action plan, which must include a detailed time schedule, and resource allocation signed off by top management, to the satisfaction of the Director and/or the Regional Director of measures taken to -

a) correct the impact resulting from the incident;
b) prevent the incident from causing any further impact; and
c) prevent a recurrence of a similar incident.

9..3 In the event that measures have not been implemented within 21 days of the incident to address impacts caused by the incident referred to in condition 9.1, or measures which have been implemented are inadequate, the Director and/or the Regional Director may implement the necessary measures at the cost and risk of the permit holder.

9.4 The permit holder must keep an incident report and complaints register, which must be made available to external auditor, Departmental and DWAF auditors for the purpose of audit.

9.5 The Department must be notified without delay in the case of the following:

a) any malfunction, breakdown or failure of equipment or techniques, accident or fugitive emission which has caused , is causing or may cause significant pollution;
b) the breach of limit specified in this permit; and
c) any significant adverse environmental and health effects.

9.6 Prior written notification shall be given to the Department of the following events and in the specified timescales.

a) as soon as practicable prior to the permanent cessation of any operational activities
b) full or partial cessation of the operational activities for a period likely to exceed 3 months
c) full or partial resumption of the operation of all or part of the activities after a cessation notified under (b) above
d) prior to commencement of operations, the professional engineer appointed by the permit holder in line with condition 4.1.2 must make a signed declaration that condition 4.2.1 and 4.2.2 above have been adhered to.

9.7 The Department must be notified within 7 days of any changes to the management of the site including the name of the incoming person together with evidence that such person has the required technical competence.

9.8 The Department must be notified within 14 days of the following changes:

a) Permit Holder's trading name, registered name or registered office address;
b) Particular's of the Permit Holder's ultimate holding company (including details of an ultimate holding where a Permit Holder has become a subsidiary;
c) steps taken with a view to the Permit Holder , or any one of them, going into bankruptcy, entering into composition or arrangement with creditors, or ,in the case of them being in a partnership, dissolving the partnership.

9.9 Each external audit report referred to in condition 8.2 must be submitted to the Director within 30 days from the date on which the external auditor finalised the audit.

10. REHABILITATION AND CLOSURE OF THE SITE

10.1 CLOSURE OF THE SITE

10.1.1 Immediately following the cessation of rubble and garden deposition on the site, the surface of the site must be covered and maintained in such a way that:

a) the formation of pools due to rain is prevented;
b) free surface runoff of rain-water is ensured;
c) contamination of stormwater is prevented;
d) no objects or material which may hamper the rehabilitation of the site are present and;
e) little or no erosion occurs, until the approved rehabilitation plan referred to in condition 10.1 is completely implemented.

10.1.2 The permit holder shall remain responsible for the site, or any of its impacts on the environment, after operations on the site have ceased.

11. LEASING AND ALIENATION OF THE SITE

11.1 Should the permit holder want to alienate or lease the site, he/she shall notify the Director in writing of such an intention at least 120 days prior to the said transaction.

11.2 Should the permit holder want to transfer holder-ship of this, he/she shall notify and obtain approval from the Director for such a transfer, at least 120 days prior to the said transfer.

11.3 Any subsequent permit holder shall be bound by the conditions of this permit.

12 RECORDING

12.1 The permit holder must keep records and update all the information referred to in Annexure III and submit this information to the Director and the Regional Director on an annual basis.

12.2 All records required or resulting from activities required by this permit must:
(a) be legible;
(b) be made as soon as reasonably practicable and should form part of the external audit report;
(c) if amended, be amended in such a way that the original and any subsequent amendments remain legible and are easily retrievable and
(d) be retained in accordance with a documented procedures which is approved by the Department.

12.3 The permit holder must record all borehole data and chemical analyses in the format attached as Annexure IV.

13. GENERAL

13.1 This permit shall not be transferable unless such transfer is subject to condition 11.2.

13.2 This permit shall not be construed as exempting the permit holder from compliance with the provisions of the National and Provincial Legislation and any relevant Ordinance, Regulation, By-laws and relevant National Standards and norms.

13.3 Transgression of any condition of this permit could result in the validity of the permit being terminated by the Department.

13.4 The permit holder must provide the Director with any information which he/she may require to enable him/her to fulfil the objective of the Environment Conservation Act, 1989 (Act 73 of 1989) as amended or any current legislation for waste management purposes.

13.5 This permit is valid for a period of twenty (20) years and shall be reviewed every five years from the date of issue or at any time before or after that date. Based on the results of the review, compliance to permit conditions or recommendations from audit reports and or changing legislation, the Permit could be amended or withdrawn or validity thereof extended.

Ms Nosipho Ngcaba
DIRECTOR-GENERAL
DATE: 2/10/2008

ANNEXURE I

WATER QUALITY VARIABLES REQUIRED FOR BACKGROUND MONITORING : CONDITIONS 6.3 Cont.

Free & saline ammonia as N (NH_4-N)
Boron (B)
Magnesium (Mg)
Cadmium (Cd)
Chloride (Cl)
Fluoride (F)
pH
Sodium (Na)
Electrical conductivity (EC)
Sulphate (SO_4)

ANNEXURE I

WATER QUALITY VARIABLES REQUIRED FOR BACKGROUND MONITORING : CONDITIONS 6.3

Alkalinity (P.Alk)
Calcium (Ca)
Chromium (hexavalent) (Cr^{6+})
Chromium (Total) (Cr)
Chemical oxygen demand (COD)
Cyanide (CN)
Mercury (Hg)
Lead (Pb)
Nitrate (as N) (NO_3-N)
Phenolic compounds (Phen)
Potassium (K)
Total dissolved solids (TDS)

ANNEXURE II

WATER QUALITY VARIABLES REQUIRED FOR BACKGROUND MONITORING AND DETECTION MONITORING: CONDITIONS 6.4.1

(a) Bi-annually for:

Alkalinity (P.Alk)
Chemical oxygen demand (COD)
pH
Total dissolved solids (TDS)
Chlorides (Cl)
Nitrate (NO_3-N)
Potassium (K)

ANNEXURE II

WATER QUALITY VARIABLES REQUIRED FOR BACKGROUND MONITORING AND DETECTION MONITORING: CONDITIONS 6.4.1 Cont.

(b) Annually for:

Electrical conductivity (EC)
Calcium (Ca)
Magnesium (Mg)
Sodium (Na)
Sulphate (SO_4)
Fluoride (F)

ANNEXURE III

INFORMATION THAT MUST BE SUBMITTED ON AN ANNUAL BASIS: CONDITION 12.1

NAME OF SITE: _____ DATE OF REPORT: _____ (yy/mm/dd)

1. Registered owner(s) of property on which disposal site is situated:

Name	Telephone	
Postal Address	Fax	
	Postal Code	

2. Operator in control of disposal site:

Name	Telephone	
Identity number	After hours	
Educational Qualifications (*)		

3. Latest estimated lifetime of the disposal site: _____yr.

4. Indicate the type of waste and approximate quantities of waste disposed of during the year:

Type of waste	Quantity (m^3 $annum^{-1}$)
Garden refuse	
Building rubble	
TOTAL	

Receptor	Source	Harm	Pathway	Probability of exposure	Consequence	Magnitude of risk	Justification for magnitude	Risk Management	Residual risk
What is at risk? What do I wish to protect?	What is the agent or process with potential to cause harm?	What are the harmful consequences if things go wrong?	How might the receptor come into contact with the source?	How likely is this contact?	How severe will the consequences be if this occurs	What is the overall magnitude of the risk? (Low-Medium - High)	On what did I f my judgement?	How can I best manage the risk to reduce the magnitude?	What is the magnitude of the risk after management ? This residual risk will be controlled by Compliance Assessment)
Local human population	Airbone dusts /particulars	Nuisance -dust on cars, clothing etc.	Deposition from air						
Local human population	Noise from machine	Nuisance loss of amenity, loss of sleep	Air transport						
Local human population	Fugitive releases, waste, litter and mud on roads	Nuisance loss of amenity.	Vehicles entering and leaving the Site. Waste escaping the Site						
Local human population	Odour	Nuisance loss of amenity.	Air transport						
Local human population	Scavenging birds and animals	Nuisance loss of amenity.	Air transport and over land						
	Pests (e.g flies)	Nuisance loss of amenity.	Air transport and over land						
Local human population	Flooding of Site	If waste is washed off site it may cause contamination	Flood waters						
Groundwater and surface waters	Fire on site leading to run-off from polluted fire fighting waters.	Contaminating of groundwater and aquatic ecosystems	Direct and indirect run-off						

Receptor	Source	Harm	Pathway	Probability of exposure	Consequence	Magnitude of risk	Justification for magnitude	Risk Management	Residual risk
What is at risk? What do I wish to protect?	What is the agent or process with potential to cause harm?	What are the harmful consequences if things go wrong?	How might the receptor come into contact with the source?	How likely is this contact?	How severe will the consequences be if this occurs	What is the overall magnitude of the risk? (Low-Medium - High)	On what did I f my judgement?	How can I best manage the risk to reduce the magnitude?	What is the magnitude of the risk after management ? This residual risk will be controlled by Compliance Assessment)
Local human population and/or livestock gaining unauthoris ed access to the activities	All non-site hazards-particularly relating to waste handling & storage activity	People/ livestock coming into contact with hazards	Direct physical contact						
		Arson and/or vandalism causing the release of polluting materials	Arson-air. Liquids polluting watercourse s and/or groundwater						
Ground water	Contamin ated run-off from waste	Contaminating of ground water	Soil to ground water to borehole.						
Local human population	Smoke from burning of waste in case of fire.	Nuisance, loss of amenity, loss of sleep. Respiratory irritation/illness	Air transport						
EXPAND TABLE AS PER YOUR RISKS									

I, the undersigned, declare that the information stated above is to my knowledge a true reflection of the status at the _____waste disposal site.

Signature: _____

Name: _____

Capacity: _____

Place: _____ Date_____

ANNEXURE IV

FORM TO BE USED FOR CHEMICAL INFORMATION: CONDITIONS 12.3

Name of site				
Borehole/observation- point name/number				
Sampling date (y-m-d):		Method:	Bail	
Sampling Time			Pump	
Time after start of pump:	h min	Depth of sample		m
Date of analysis (y-m-d)		Laboratory		

General chemistry

Constituent	Unit	Value	Constituent	Unit	Value
pH	(-log[H^+])			(mg/l)	
EC	(mS/m)			(mg/l)	
TDS	(mg/l)			(mg/l)	
Ca	(mg/l)			(mg/l)	
Mg	(mg/l)			(mg/l)	
Na	(mg/l)			(mg/l)	
K	(mg/l)			(mg/l)	
Alkalinity	(mg $CaCO_3$/l)			(mg/l)	
Cl	(mg/l)			(mg/l)	
SO4	(mg/l)			(mg/l)	
NO3-N	(mg/l)			(mg/l)	
F	(mg/l)				
COD	(mg/l)				
NH4-N	(mg/l)				
Phenol	(mg/l)				
PO4	(mg/l)				
TOX	(µg/l)				
TOC	(mg/l)				
Ba	(mg/l)				

DEPARTMENT OF ENVIRONMENT AND NATURE CONSERVATION
ISEBE LEZENDALO NEZOLONDOLOZO
LEFAPHA LA TIKOLOGO LE TSHOMARELOYA TLHAGO
DEPARTEMENT VAN OMGEWING EN NATUURBEWARING

Metlife Towers
T-Floor
Privat Bag 6102
KIMBERLEY
8300

Moago wa Metlife
T-Floor
Kgetsanaposo X6102
KIMBERLEY
8300

Isakhiwo Se Metlife
T-Floor
Inqxowa yeposi X6102
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Metlife Towers
T-Floor
Privaatsak X6110
KIMBERLEY
8300

HOD
Tel. 053 807 7300
Fax. 053 807 7367

Corporate Services
Tel. 053 807 7300
Fax. 053 807 7328

Enquiries : S.Mbanjwa
Dipatlisiso :
Imibuzo :
Navrae :

Date : 20th April 2011
Lethla :
Umhla:
Datum:

Reference : NNO 25/19
Tshupelo :
Isalathiso : NC/SIY/TSA/BEESHOEK1/10/2010
Verwysings:

Received.
2011 -05- 03 07h20

Mr. Mark Oosthuizen
Assmang Iron Ore (Beeshoek Mine)
P.O. Mancorp Mine
Beeshoek
8423

Fax: 053 – 311 4642

Dear Sir/ Madam

APPLICATION FOR ENVIRONMENTAL AUTHORISATION:GNR 386:ACTIVITIES 15 AND GNR 387: ACTIVITITY 5:ASSMANG IRON ORE BEESHOEK MINE R385 ROAD DIVERSION, TSANTSABANE LOCAL MUNICIPALITY, SIYANDA DISTRICT MUNICIPALITY, NORTHERN CAPE PROVINCE.

By virtue of the powers conferred to me by the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Regulations, 2006, the Department hereby grants authorisation **APPLICATION FOR ENVIRONMENTAL AUTHORISATION: GNR 386: ACTIVITIES 15 AND GNR 387: ACTIVITITY 5: ASSMANG IRON ORE BEESHOEK MINE R385 ROAD DIVERSION, TSANTSABANE LOCAL MUNICIPALITY, SIYANDA DISTRICT MUNICIPALITY, NORTHERN CAPE PROVINCE**. A detailed description of the activity is given in the **Scoping Report Dated May 2010**, subject to the conditions listed in the environmental authorisation. The environmental authorisation and reasons for the decision are attached herewith.

In terms of regulation 10(2) of the Environmental Impact Assessment Regulations, 2006, you are instructed to notify all registered interested and affected parties, in writing and within seven (7) calendar days of receiving of this letter, of the Department's decision in respect of your application as well as the provisions regarding the making of appeals that are provided for in the regulations.

Your attention is drawn to Chapter 7 of the Regulations which regulates appeal procedures. Should you / any person affected by this decision wish to appeal any aspect of the decision, you or a person affected by this decision must, *inter alia,* lodge a notice of intention to appeal, as prescribed in regulation 62 of Environmental Impact Assessment Regulations, 2006, with the Member of the Executive Council, Ministry of Environment and Nature Conservation within 10 days of receiving this letter, by means of one of the following methods:

By facsimile:	(053) 832 1026;
By post:	Private Bag x 6102, Kimberley, 8300 or
By hand:	T-Floor, Metlife Towers, Kimberley, 8300.

Should you decide to appeal, you must serve a copy of your notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where, and for what period, the appeal submission will be available for inspection.

Yours faithfully

Mr J.J. Mutyorauta
DIRECTOR: ENVIRONMENTAL MANAGEMENT
DEPARTMENT OF ENVIRONMENT AND NATURE CONSERVATION

DATE OF DECISIONS: 21st April 2011

Cc: **Tanja Bekker**
GCS (Pty) Ltd
011- 803 5745

Northern Cape Province
DEPARTMENT OF
ENVIRONMENT & NATURE
CONSERVATION

Porofensi Ya Kapa Bokone
LEFAPHA LA, TIKOLOGO
LE TSHOMARELO YA TLHAGO

ENVIRONMENTAL AUTHORISATION
in terms of National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2006

Authorisation Register Number:	**Permit 17/2011**
Reference Number:	**NC/SIY/TSA/BEESHOEK1/10/2010**
Last Amended:	**n/a**
Holder of Authorisation:	**ASSMANG IRON ORE (BEESHOEK MINE)**
Location of activity:	**BEESHOEK, ON THE FARM BEESHOEK 448**

DEFINITIONS

"**Activity**" means an activity identified in Government Notice No. R.386 and No. R. 387 of 2006 as a listed activity.
"**Applicant**" means a person who has submitted an application
"**Application**" means an application for an environmental authorization in terms of chapter 3 of these regulations
"**Environmental impact assessment**", in relation to an application to which scoping must be applied, means the process of collecting, organising, analysing, interpreting and communicating information that is relevant to the consideration of that application
"**Environmental impact assessment report**" means a report contemplated in regulation 32
"**EAP**" means an environmental assessment practitioner as defined in section 1 of the Act
"**Environmental management plan**" means an environmental management plan in relation to identified or specified activities envisaged in chapter 5 of the Act and described in regulation 34
"**Interested and affected party**" means an interested and affected party contemplated in section 24(4) (d) of the Act, and which in terms of that section includes:

- Any person, group of persons or organisation interested in or affected by an activity, and
- Any organ of state that may have jurisdiction over any aspect of the activity

"**Public participation process**" means a process in which potential interested and affected parties are given an opportunity to comment on, or raise issues relevant to, specific matters
"**Plan of study for environmental impact assessment**" means a document contemplated in regulation 29(1) (i) which forms part of a scoping report and sets out how an environmental impact assessment must be conducted
"**Scoping**" means a process contemplated in regulation 28(e)
"**The Act**" means the National Environmental Management Act, 1998 (Act No. 107 of 1998)

DECISION

The Department is satisfied, on the basis of information available to it and subject to compliance with conditions of this environmental authorisation, that the applicant should be authorised to undertake the activity specified below.

Details regarding the basis on which the Department reached this decision are set out in Annexure1.

ACTIVITIES AUTHORISED

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2006 the Department hereby authorises –

ASSMANG IRON ORE with the following contact details:

Mr. Andrew Matolong/ Mark Oosthuizen
P.O Box 1001
Mancorp Mine
Beeshoek
8423
Tel: 053 311 6305
Fax: 054 311 4642

to undertake the following activities (hereafter referred to as "the activity") in terms of the scheduled activities listed below:

Activity No. 15 of GN.R 386 "the construction of a road that is wider than 4 metres or that has a reserve wider than 6 metres, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 metres long"; and

Activity No.5 of GN.R 387"the route determination of roads and design of associated physical infrastructure, including roads that have not yet been built for which routes have been determined before the publication of this notice and which has not been authorized by a competent authority in terms of the Environmental Impact Assessment Regulations, 2006 made under section 24(5) of the Act and published in Government Notice No R.385 of 2006, where –
b) the road is administered by a provincial authority" on different portions of the farm Beeshoek, Beeshoek village, Tsantsabane local Municipality of the Siyanda District Municipality, Northern Cape Province, hereafter referred to as (the property).

The granting of this environmental authorisation is subject to the conditions set out below.

CONDITIONS

Scope of authorisation:

1. Authorisation of the activity is subject to the conditions contained in this authorisation, which conditions form part of the environmental authorisation and are binding on the holder of the authorisation.
2. The holder of the authorisation shall be responsible for ensuring compliance with the conditions by any person acting on his or her behalf, including but not limited to, an agent, sub-contractor, employee or person rendering a service to the holder of the authorisation.
3. The activity(s) which is authorised may only be carried out at the property indicated above.
4. Any changes to, or deviations from, the project description set out in this authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further authorisation in terms of the regulations.
5. This authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

General conditions:

6. A copy of this authorisation must be kept at the property where the activity will be undertaken. The authorisation must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the authorisation who works or undertakes work at the property.
7. Where any of the applicant's contact details change, including the name of the responsible person, the physical or postal address and/ or telephonic details, the applicant must notify the Department as soon as the new details become known to the applicant.
8. The holder of the authorisation must notify the Department, in writing and within 24(TWENTY FOUR) hours, if conditions 16 of this authorisation cannot be or is not adhered to. In all other cases, the holder of the authorisation must notify the Department, in writing, within seven (7) days if any condition of this authorisation is not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance.
9. Non-compliance with a condition of this authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the regulations.
10. This authorization is subject to the approval by the relevant local authorities i.e. in terms of any relevant legislation administered by those local authorities.
11. The activity may not commence without the necessary permits/licenses/approvals and/or service agreements, where it is relevant, from or with the relevant regulatory authorities

whether national, provincial or local (these include but are not limited to National Department of Environmental Affairs, National Department of Agriculture, Fisheries and Forestry, Department of Housing & Local Government, Department of Water Affairs, Department of Mineral Resources, Department of Transport, Roads & Public Works, Department of Arts, Sports & Culture, South African Heritage Resources Agency, South African Civil Aviation Authority).

12. The activity, including site preparation, may not commence before the thirty (30) day appeal period expires or until such time as the Department has considered any appeals that have been lodged.

    a. One week's written notice must be given to the Department before commencement with the activity.
    b. Such notice shall make clear reference to the site location details and the reference number given above.
    c. The said notice must also include proof of compliance with the following conditions described herein:
        i. Conditions:11

13. The applicable conditions of this authorization must form part of all contractors' and sub-contractors' conditions of contract. A performance-based requirement with regard to environmental impact management must be included in all contracts related to any aspect of this authorization.

14. The applicant must carry out regular environmental audits to establish compliance with the conditions of this authorization and contracts.

15. Any complaints regarding the said development must be brought to the attention of the Department within 24 hours after receiving the complaint. A complaints register must be kept up to date for inspection by the Department.

16. Officials in the employ of the Department shall be given access to the property as described above (see detailed description of the activity) for the purposes of assessing and/or monitoring compliance with the conditions contained in this Record of Decision. Where the activity is located on a third party's property the applicant shall be responsible to arrange access for departmental officials.

17. This Department may add to, change and/or amend any of the conditions in this authorization if, in the opinion of the Department, the addition, change of amendment is environmentally justified. In event that such impacts exceed its significance as predicted in the independent consultant's Environmental Impact Report and supporting documentation, the authorization may be withdrawn after proper procedures were followed.

18. In the event of any dispute concerning the significance of a particular impact, the opinion of this department in respect of its significance will prevail.

19. The developer must make sure that issues of waste and visual aspects are kept into limited and acceptable level during construction and operation phases, and appropriate management be practised,

20. The applicant shall be responsible for all costs necessary to comply with the above conditions unless otherwise specified.
21. The applicant must apply the principle of best practicable environmental option for all technologies used/ implemented during construction and operation phases.

22. Stockpile and similar areas must be rehabilitated to their original or better condition as soon as construction is complete.

23. Access routes are to be kept as dust free as possible particularly during the construction period by using watering trucks.

24. To address the issue of erosion, number of access routes must be restricted, only to those that are strictly necessary for the development and construction/transportation vehicles must not be allowed to move off these roads.

Appeal of authorisation:

25. The holder of the authorisation must notify every registered interested and affected party, in writing and within 7 (SEVEN) calendar days, of receiving notice of the Department's decision to authorise the activity.

26. The notification referred to in 25 must –
    - specify the date on which the authorisation was issued;
    - inform the interested and affected party of the appeal procedure provided for in Chapter 8 of the regulations; and
    - advise the interested and affected party that a copy of the authorisation and reasons for the decision will be furnished on request.

27. If the applicant should appeal against this record of decision, he/she must inform all interested and affected persons that such an appeal is being lodged with the MEC and if requested, the applicant/appellant must provide those persons with reasonable access to a full copy of the appeal within a reasonable time before expiry of the thirty day appeal period.

Management of activity:

28. All areas disturbed during the commissioning of the activity must be rehabilitated.

29. Best practice of waste avoidance, minimisation and disposal of waste at an appropriate facility must be implemented.

Monitoring:

30. The monitoring of the constructors, compliance with conditions of this Environmental Authorization is essential and must be done on a weekly basis. Any deviances from the conditions of this Environmental Authorization must be rectified immediately.

31. A copy of this Authorization and an EMP must always be available on-site so as to monitor compliance with the conditions outlined in both the documents (ROD and EMP). Both copies of an EMP and ROD must be used as on-site reference documents during all phases of this development.

Recording and Reporting to the Department:

32. Records relating to compliance or non-compliance with any condition of this authorization must be kept in good order. Such records must be made available to any Official from Monitoring Compliance and Enforcement section of the Directorate: Environmental Management within seven (7) days of written request by the said Officer.
33. Adequate preventative measures must be undertaken to avoid groundwater contamination when installing septic tanks; they must be put in banded concrete walls

34. Any complaints regarding the said development must be brought to the attention of the Department within 24 hours after receiving the complaints register must be kept up to date for inspection by the Department. Where any of the applicant's contact details change, including the name of the responsible person, the physical or postal address and/ or telephonic details , the applicant must notify the Department as soon as the new details become known to the applicant.

Commissioning of the activity:

35. Seven (7) days written notice must be given to the Department that the activity will commence. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence.

36. General waste must be collected in containers disposed of regularly at a permitted landfill site. Recyclable waste must be recovered for recycling purpose. NB: No temporary dumping of waste is allowed on site. Precautionary measures should be taken to prevent refuse from spreading from or on the site.

37. Should protected trees be destructed, relocated and /or disturbed, permit must be obtained from Department of Agriculture, Fisheries and Forestry (DAFF) and Department of of Environment and Nature Conservation (DENC).

38. Any complaint from the public during the construction and operation of this project must be attended to by the holder of this authorisation as soon as possible to the satisfaction of parties concerned.

39. The authorized activities, including site preparation shall not commence before the statutory 30 days of an appeal period has expired.

40. The safety of the participants must be ensured by having regular safety inspection and ensuring participants are equipped with necessary safety equipments.

41. Open fire is strictly prohibited on site.

42. The uncovering of previously undetected archaeological or cultural remains must be reported immediately to the South African Heritage Resources Agency (SAHRA), failure to do so constitute an offence in terms of the National Heritage Resources Act, Act 25 of 1999 as amended.

43. Untreated sewage must not be discharged directly into the natural environment.

44. Spillage of petroleum products (fuel and lubricants) must be avoided. Temporary storage of petrochemical products and servicing of machinery and vehicles on site will be allowed except at a site specifically designed for that purpose. In terms of accidental spillage, contaminated soil must be removed for bioremediation or disposed of at a recognized facility for the substance concerned. Disturbed land must be rehabilitated and seeded with vegetation seed naturally occurring on the site.

45. The development must comply with the Municipal by-law.
46. Chemical toilets must be available for workers on site during construction phase only, i.e. sewage waste must be disposed off at the Municipal sewage plant on a regular basis. No "long drop" toilets will be allowed. No open space or surrounding bush shall be used as toilet facility under any circumstances.

47. It is the holder of this authorization's responsibility to ensure that an ongoing management and monitoring of the impacts of the activity on the Environment throughout the life cycle of the activity is put into practice.

48. All the areas (e.g. stockpiling of material, machines, workshop, etc) in the construction site must be clearly defined.

49. The contractor must ensure that drip trays are always available to collect any fluid that may result from accidental spillage, overflow and/or servicing. All equipments that leak must be repaired immediately and/or removed from site when necessary.

50. It is the contractor's responsibility that all staff/employees are familiar with all the emergency procedures. The contractor must also ensure that emergency numbers are visible and available and always updated.

51. The contractors must use Ready-Mix concrete. Alternatively, concrete can be mixed on mixing trays only and not on exposed soil. Concrete must be mixed only in areas, which have been specially demarcated for this purpose.

52. The contractor must take all the necessary precautionary measures to ensure that no fires are caused as a result of construction activities.

53. Old cement bags, mixing bags, platforms etc should be discarded in a wind and spill proof container. No cement bags closed or open should be left lying around the site. All visible remains of concrete should be physically removed as soon as possible, and disposed of at a suitable site.

54. All vehicles, equipments and other assets belonging to the contractor must be removed from the property upon completion of the construction works.

55. Topsoil removed during excavations must be kept separate from other material. Topsoil must be placed above other material during backfilling.

56. Precautionary principles must be followed as people's lives depend on the project.

57. The central waste collection point must be specific –where it will be situated to ensure that no soil or underground water contamination takes place this should be done at least on weekly basis.

58. Habitat Fragmentation and Alien plant infestation should be prevented at all cost.

Operation of the activity:

59. All forms of pollution must be prevented, or where it cannot, should be minimized or remedied.

60. General waste must be collected in drums containers disposed of weekly at a permitted Municipal landfill site. Recyclable waste must be recovered for recycling purpose. NB: No temporary dumping of waste is allowed on site. Precautionary measure should be taken to prevent refuse from spreading from or on the site.

61. The location of the proposed road to be constructed must remain at the co-ordinates 28^0 15' 31.5" S 22^0 58' 36.3"E

62. The proposed road to be constructed/ R 385 Beeshoek road diversion must conforms to the design and the specifications of Annexure 1 appended in the final EIR submitted by you on the 16 August 2010.

Site Closure and Decommissioning:

63 Should the proposed development no longer be required, or if decommissioning is required for whatsoever reason then the applicant must ensure that the structures are removed from site and the area rehabilitated to its original or better condition.

64 All construction and storage sites and all areas disturbed by the project must be rehabilitated to their former or better condition. Those sites and areas must be re-vegetated with indigenous plants upon completion of the proposed development and must take place where necessary.

65 And should the project be abandoned or decommissioned, a Closure Management Plan must be compiled and the holder of the Environmental Authorization must rehabilitate the site to the satisfaction of this Department.

Non-compliance

66 In the event of non-compliance by employees and contractors during the construction, operation and decommissioning phases of the project, the applicant will be held liable.

67 The applicant shall be responsible for all the costs necessary to comply with the above conditions unless otherwise stated.

68 Provincial Government, Local Authority or committees appointed in terms of the application or any other public authority or organization shall not be held responsible for any damages or losses suffered by the developer or his/her successor in title in any instance where construction or operation subsequent to construction are to be temporarily or permanently stopped for reasons of non-compliance by the developer with conditions of approval as set out in the document or any other subsequent document emanating from this approval.

DURATION AND PERIOD OF VALIDITY

This activity(s) must commence within a period of three (3) years from the date of issue. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.

APPEAL

In terms of Chapter 7 of Environmental Impact Assessment Regulations, 2006, if the applicant or a person affected by this Decision wishes to appeal this decision, a notice of intention to appeal must be lodged within ten (10) days of being notified of the decision, and an appeal must **be lodged within thirty (30) days** of lodging of the notice to appeal to:

The Member of the Executive Council
Ministry of Environment & Nature Conservation
Private Bag X6102
Kimberley
8300
Fax: (053) 8321026

Appeals must comply with the provisions of Chapter 7 of Environmental Impact Assessment Regulations, 2006 Government Notice No. R. 385 of 21 April 2006.

Mr. JJ Mutyorauta – Director
Environmental Management
DEPT. OF ENVIRONMENT & NATURE CONSERVATION

DATE OF ENVIRONMENTAL AUTHORISATION: 21st April 2011

ANNEXURE 1: REASONS FOR DECISION

1. Background

The applicant, Assmang Iron Ore, applied for Authorization to carry out the following activity–

The proposed construction of a road/R 385 Beeshoek road diversion on different portions of the farm Beeshoek 448, Beeshoek, in the Northern Cape {Activity No.15 of GN. R 386; and activity No. 5 of GN R 387 of 21 April 2006}

(Geographical Co-ordinates 28^0 15' 31.5" S 22^0 58' 36.3"E which falls within the jurisdiction of Tsantsabane local Municipality of the Siyanda District Municipality), hereafter referred to as "the property"

Assmang Iron Ore (i.e. the applicant) appointed GCS (Pty) Ltd, an independent environmental consultant company, to undertake a screening process.

a) The process followed is a Scoping and full EIA

b) The Environmental Assessment Practitioner did submit the application form for Environmental Authorization before submitting the Scoping and Environmental Impact Assessment Reports.

c) Proof of Public Participation was submitted together with the Scoping Report and received by the Department on the 16th of August 2010.

2. Information considered in making the decision

In reaching its decision, the Department took, *inter alia,* the following into consideration:

a) The information contained in the Scoping and Environmental Impact Assessment Reports submitted by the EAP and reviewed by Mr. Khuthadzo Manyatsha;

b) The comments received from interested and affected parties as included in the Environmental Impact Assessment Report;

c) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998(Act No.107 of 1998).

d) The findings of the site visit undertaken by Mr. Khuthadzo Manyatsha and Mr. Andrew Motolong of the Assmang Iron Ore on the 20/09/20

3. Key factors considered in making the decision

All information presented to the Department was taken into account in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below.

a) The potential environmental impacts associated with the proposed construction of a road/R 385 Beeshoek road diversion as described in the Scoping and Environmental Impact Assessment reports are adhered to.

b) The legal and procedural requirements have been complied with and the information contained in the Scoping and Environmental Impact Assessment Reports to satisfaction of this Department.

4. Findings

After consideration of the information and factors listed above, the Department made the following findings -

a. The potential environmental impacts can be kept to acceptable limits.

b. The proposed activity is accepted by all interested and affected parties.

c. The proposed activity will improve the standard of living of the communities surrounding Postmasburg town due to the fact that the road to be constructed is an access road to the mining activity that has been proposed at the Beeshoek, hence, it will also create job opportunities.

d. The impacts may be reduced only if the developer adheres to the impact mitigation measures contained in the EMP.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the proposed activity will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental impacts resulting from the proposed activity can be mitigated to acceptable levels. The application is accordingly granted.

water & sanitation
Department
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

Private Bag X313, Pretoria, 0001, Sedibeng Building, 185 Francis Baard Street, Pretoria
Tel: (012) 336-6817 Fax: (012) 326-4472/ (012) 326-2715

AMENDMENT LICENCE IN TERMS OF SECTION 50 OF THE NATIONAL WATER ACT, 1998 (ACT NO 36 OF 1998)

I, ***Mbulelo Tshangana***, in my capacity as Acting Director-General in the Department of Water and Sanitation and acting under authority of the powers delegated to me by the Minister of Human Settlements, Water and Sanitation, hereby authorises the amendment of licence: **Assmang (Pty) Ltd: Beeshoek Iron Ore Mine**, dated **21 August 2018**, licence no: **10/D73A/ABGJ/2592.**

SIGNED: _____

DATE: 19/11/2019

The above mentioned licence is amended as follows:

Amendment of condition 2.1 of Appendix IV

1. Condition 2.1 of the licence is hereby amended-

   a. by the substitution in condition 2.1 of the following condition:

   "2.1. The Licensee is authorised to dispose of a maximum quantity in cubic metres (m^3) of tons of waste or water containing waste into the waste management facilities on the properties described in Table 4.

   b. by the substitution in condition 2.1 for Table 4 with the following Table:

Table 4: Summary of section 21 (g) water uses

Water use(s)	**Purpose/ Description**	**Property Description**	**Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)**	**Co-ordinates**
Product Stockpile Area 1 & 2	Waste disposal - Product Stockpile Area 1 & 2	Portion 1 of Beesthoek Farm 448	5 998 500 t/a	28^0 16' 51.18"S 23^0 00' 03.31"E
South Detrital	Waste disposal	Portion 4 of	2 240 000 t/a	28^0 19' 40.5"S

B09276

Water use(s)	Purpose/ Description	Property Description	Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)	Co-ordinates
stockpiled Area	- South Detrital stockpiled Area	Farm Olynfontein 475		23^0 00' 50.2"E
Waste Rock Dump North/stockpiles	Waste disposal - Waste Rock Dump North/stockpiles	Portion 1 of Beesthoek Farm 448	7 000 000 **[tons]**tonnes /annum	28^0 17' 43.93"S 23^0 00' 36.85"E
Jig Discard Dump/Stockpiles	Waste disposal - Jig Discard Dump/Stockpiles	Portion 1 of Beesthoek Farm 448	9 000 000 **[tons]**tonnes /annum	28^0 17' 16.38"S 23^0 00' 23.44"E
East Pit Waste Rock Dump stockpiles	Waste disposal - East Pit Waste Rock Dump stockpiles	Portion 4 of Farm Olynfontein 475	68 850 000 **[tons]**tonnes /annum	28^0 20' 17.916"S 23^0 00' 10.965"E
South Contaminated ROM 1 Off grade waste dump 1	Waste disposal - South Contaminated ROM 1 Off grade waste dump 1	Portion 4 of Farm Olynfontein 475	4 450 000 t/a	28^0 19' 1.48"S 22^0 59' 57.7"E
South Contaminated ROM 2 (including BIS) – Off grade waste dump 2	Waste disposal - South Contaminated ROM 2 (including BIS) – Off grade waste dump 2	Portion 4 of Farm Olynfontein 475	1 920 000 t/a	28^0 19' 17.63"S 23^0 00' 08.74"E
South Off grade ROM 1 – Off grade waste dump 3	Waste disposal - South Off grade ROM 1 – Off grade waste dump 3	Portion 0 of Beesthoek Farm 448	2 508 000 t/a	28^0 18' 54.49"S 23^0 00' 19.72"E

Water use(s)	Purpose/ Description	Property Description	Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)	Co-ordinates
Disposal of contaminated water	Disposal of contaminated water into Dam D86	Portion 1 of Beesthoek Farm 448	7 421 078 m^3/a 269 m^3	28^0 17' 08.068"S 23^0 00' 15.131"E
Disposal of contaminated water	Disposal of contaminated water into South Evaporation Ponds	Portion 0 of Beesthoek Farm 448	1 221 m^3/a 1 600 m^3	28^0 18' 48.5"S 23^0 00' 11.0"E
Village Waste Rock Dump/stockpiles	Waste disposal - Village Waste Rock Dump/stockpiles	Portion 0 of Beesthoek Farm 448	31 500 000 **[tons]**tonnes /annum	28^0 18' 21.630"S 22^0 59' 26.890"E
ROM Stockpile	Waste disposal - ROM Stockpile	Portion 0 of Beesthoek Farm 448	720 000 **[tons]**tonnes /annum	28^0 18' 55.383"S 23^0 00' 02.324"E
HH Pit Waste Rock Dump/ Stockpiles	Waste disposal - HH Pit Waste Rock Dump/ Stockpiles	Portion 1 of Beesthoek Farm 448	6 800 000 **[tons]**tonnes /annum	28^0 16' 47.08"S 23^0 01' 21.81"E
North ROM Stockpile	Waste disposal - North ROM Stockpile	Portion 1 of Beesthoek Farm 448	1 400 000 **[tons]**tonnes /annum	28^0 16' 39.3"S 23^0 00' 11.6"E
Disposal of contaminated water	Disposal of contaminated water into Fine Residue Dam	Portion 1 of Beesthoek Farm 448	4 864 520 m^3/a	28^0 16' 27.0"S 23^0 00' 48.0"E
Plant Stockpile	Waste disposal - Plant Stockpile	Portion 1 of Beesthoek Farm 448	300 000 **[tons]**tonnes /annum	28^0 17' 20.9"S 22^0 59' 58.6"E
Dust suppression with dirty water	Dust Suppression of Haul roads (North – BN	Portion 1 of Beesthoek Farm 448	257 518 m^3/a	Haul and main roads

Water use(s)	Purpose/ Description	Property Description	Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)	Co-ordinates
	Truck filing point)			28^0 16' 12.559"S 23^0 00' 10.784"E
Dust suppression with dirty water	Dust Suppression of Haul roads (South – SM filing point)	Portion 0 of Beesthoek Farm 448	211 660 m^3/a	Haul roads 28^0 18' 49.821"S 22^0 59' 54.705"E
Disposal of contaminated water	Disposal of contaminated water into Tank 26TK01A	Portion 1 of Beesthoek Farm 448	225 418 m^3/a 100m^3	28^0 16' 45.7"S 22^0 59' 56.8"E
Disposal of contaminated water	Disposal of contaminated water into Tank 26TK01B	Portion 1 of Beesthoek Farm 448	225 418 m^3/a 100m^3	28^0 16' 45.775"S 22^0 59' 56.844"E
Disposal of contaminated water	Disposal of contaminated water Thickener TH01 Dam	Portion 1 of Beesthoek Farm 448	7 522 316 m^3/a 23 000m^3	28^0 17' 14.9"S 23^0 00' 06.6"E
Disposal of contaminated water	Disposal of contaminated water into Clarifier Dam DD01	Portion 1 of Beesthoek Farm 448	6 657 912 m^3/a 2 000m^3	28^0 17' 17.194"S 23^0 00' 07.841"E
Disposal of contaminated water into Stormwater Dam North	Disposal of contaminated water into Stormwater Dam North	Portion 1 of Beesthoek Farm 448	76 700m^3/a 15 000m^3	28^0 17' 30.63"S 22^0 59' 46.48"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448	512.5 m^3/a	28^0 17' 21.900"S 23^0 00' 8.200"E

Water use(s)	Purpose/ Description	Property Description	Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)	Co-ordinates
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 15.200"S 23^0 00' 2.800"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 18.382"S 23^0 00' 1.296"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 25.900"S 23^0 00' 2.500"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 25.200"S 23^0 00' 01.800"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 17.000"S 22^0 59' 56.900"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 13.400"S 22^0 59' 56.900"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 14.100"S 22^0 59' 54.800"E
Disposal of	Disposal of	Portion 1 of		28^0 17' 9.100"S

Water use(s)	Purpose/ Description	Property Description	Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)	Co-ordinates
domestic effluent into sewage sumps	domestic effluent into sewage sumps Portion 1	Beesthoek Farm 448		22^0 59' 56.100"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 6.700"S 22^0 59' 54.700"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 4.000"S 22^0 59' 56.100"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 16' 57.800"S 22^0 59' 57.100"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 18' 30.800"S 23^0 00' 22.000"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 31.100"S 22^0 59' 57.400"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 30.879"S 22^0 59' 59.288"E
Disposal of domestic	Disposal of domestic	Portion 1 of Beesthoek		28^0 17' 32.025"S

Water use(s)	Purpose/ Description	Property Description	Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)	Co-ordinates
effluent into sewage sumps	effluent into sewage sumps Portion 1	Farm 448		22^0 59' 59.401"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 34.400"S 23^0 00' 2.000"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 47.925"S 23^0 00' 06.115"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 25.800"S 22^0 59' 48.600"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 17.200"S 22^0 59' 45.600"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 16.800"S 22^0 59' 46.600"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 16.600"S 22^0 59' 46.800"E
Disposal of domestic effluent into	Disposal of domestic effluent into	Portion 1 of Beesthoek Farm 448		28^0 17' 28.600"S 22^0 59' 54.900"E

Water use(s)	Purpose/ Description	Property Description	Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)	Co-ordinates
sewage sumps	sewage sumps Portion 1			
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Beesthoek Farm 448 Portion 1		28^0 17' 26.200"S 22^0 59' 53.600"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 17' 32.400"S 22^0 59' 52.800"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Portion 1	Portion 1 of Beesthoek Farm 448		28^0 16' 59.500"S 22^0 59' 40.100"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Security building Village	Portion 1 of Beesthoek Farm 448		28^0 17' 29"S 22^0 59' 52"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps at Road Transport 2	Portion 1 of Beesthoek Farm 448		28^0 16' 36.50"S 22^0 59' 48.43"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Re	Portion 1 of Beesthoek Farm 448	498.5m^3/a	28^0 17' 20.659"S 23^0 00' 6.814"E
Disposal of domestic	Disposal of domestic	Portion 0 of Beesthoek		28^0 18' 29.716"S

Water use(s)	Purpose/ Description	Property Description	Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)	Co-ordinates
effluent into sewage sumps	effluent into sewage sumps Re	Farm 448		23^0 00' 14.846"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Re	Portion 0 of Beesthoek Farm 448		28^0 18' 34.000"S 23^0 00' 18.500"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Re	Portion 0 of Beesthoek Farm 448		28^0 18' 39.600"S 23^0 00' 17.400"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Re	Portion 0 of Beesthoek Farm 448		28^0 18' 42.900"S 23^0 00' 16.500"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Re	Portion 0 of Beesthoek Farm 448		28^0 18' 46.200"S 22^0 59' 59.300"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Re	Portion 0 of Beesthoek Farm 448		28^0 15' 59.800"S 22^0 59' 25.800"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Re	Portion 0 of Beesthoek Farm 448		28^0 15' 58.800"S 22^0 59' 26.800"E
Disposal of domestic effluent into	Disposal of domestic effluent into	Portion 0 of Beesthoek Farm 448		28^0 16' 46.700"S 22^0 59' 40.100"E

Water use(s)	Purpose/ Description	Property Description	Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)	Co-ordinates
sewage sumps	sewage sumps Re			
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps at Road Transport 1	Portion 0 of Beesthoek Farm 448		28^0 16' 34.61"S 22^0 59' 44.00"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps at Road Transport 3	Portion 0 of Beesthoek Farm 448		28^0 16' 36.06"S 22^0 59' 46.43"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps at Long distance parking	Portion 0 of Beesthoek Farm 448		28^0 16' 46.00"S 22^0 59' 39.00"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sumps Conservancy Tank at South Change House	Portion 0 of Beesthoek Farm 448		28^0 18' 34.00"S 23^{0}00' 15.00"E
Backfilling of BN opencast pit using Waste Dump Rock Materials	Disposal of waste - Backfilling of BN opencast pit using Waste Dump Rock Materials	Portion 1 of Beesthoek Farm 448	1 625 221 t/a	28^0 16' 13.9"S 23^0 00' 17.2"E
Backfilling of East Pit using	Disposal of waste -	Portion 4 of Farm	2 119 897 t/a	28^0 20' 31.2"S

Water use(s)	Purpose/ Description	Property Description	Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)	Co-ordinates
Waste Dump Rock Materials	Backfilling of East Pit using Waste Dump Rock Materials	Olynfontein 475		22^0 59' 37.7"E
Backfilling of GK opencast pit using Waste Dump Rock Materials	Disposal of waste - Backfilling of GK opencast pit using Waste Dump Rock Materials	Portion 1 of Beesthoek Farm 448	1 468 839 t/a	28^0 18' 23.4"S 23^0 01' 09.6"E
Backfilling of opencast HH Pit using Waste Dump Rock Materials	Disposal of waste - Backfilling of opencast HH Pit using Waste Dump Rock Materials	Portion 1 of Beesthoek Farm 448	459 860 t/a	28^0 16' 43.7"S 23^0 01' 20.2"E
Backfilling of HL Opencast Pit using Waste Dump Rock Materials	Disposal of waste - Backfilling of HL Opencast Pit using Waste Dump Rock Materials	Portion 1 of Beesthoek Farm 448	2 212 010 t/a	28^0 17' 21.6"S 23^0 00' 55.6"E
Backfilling of Detrital area opencast pit using Waste Dump Rock Materials	Disposal of waste - Backfilling of Detrital area opencast pit using Waste Dump Rock Materials	Portion 4 of Farm Olynfontein 475	1 224 840 t/a	28^0 19' 40.3"S 23^0 00' 29.8"E
Backfilling of West opencast Pit using Waste Dump	Disposal of waste - Backfilling of West opencast Pit using	Portion 4 of Farm Olynfontein 475	10 536 114 t/a	28^0 19' 18.6"S 22^0 59' 30.8"E

Water use(s)	Purpose/ Description	Property Description	Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)	Co-ordinates
Rock Materials	Waste Dump Rock Materials			
South ROM Stockpile 2	Disposal of waste - South ROM Stockpile 2	Portion 4 of Farm Olynfontein 475	1 000 000 **[tons]**tonnes /annum	28^0 18' 54.900"S 22^{0}59' 25.880"E
S Offgrade ROM 2	Disposal of waste - S Offgrade ROM 2	Portion 0 of Beesthoek Farm 448	1 000 000 **[tons]**tonnes /annum	28^0 18' 40.230"S 22^{0}59' 48.080"E
N Offgrade ROM 1	Disposal of waste - N Offgrade ROM 1	Portion 1 of Beesthoek Farm 448	1 000 000 **[tons]**tonnes /annum	28^0 17' 33.46"S 23^{0}00' 22.67"E
BIS ROM North 1– Stockpiles being reworked further	Disposal of waste - BIS ROM North 1– Stockpiles being reworked further	Portion 1 of Beesthoek Farm 448	2 950 000 tons (current capacity, no new depositions)	28^0 17' 40.35"S 23^{0}00' 53.51"E
BIS ROM North 2– Stockpiles	Disposal of waste - BIS ROM North 2– Stockpiles	Portion 1 of Beesthoek Farm 448	3 150 000 **[tons]**tonnes /annum	28^0 16' 57.23"S 23^{0}01' 05.97"E
Shale Stockpiles being reworked further	Disposal of waste - Shale Stockpiles being reworked further	Portion 1 of Beesthoek Farm 448	361 633 tons (current capacity, no new depositions)	28^0 16' 34.66"S 23^{0}00' 04.95"E
Quartzite Stockpiles being reworked further	Disposal of waste - Quartzite Stockpiles being	Portion 1 of Beesthoek Farm 448	1 668 163 tons (current capacity, no new depositions)	28^0 16' 46.03"S 23^{0}00' 12.39"E

Water use(s)	Purpose/ Description	Property Description	Capacity, Dimensions & Volume (m^3/annum, m^3&tons/annum)	Co-ordinates
	reworked further			
West Pit Waste Rock Dump/stockpiles	Disposal of waste - West Pit Waste Rock Dump/stockpiles	Portion 4 of Farm Olynfontein 475	21 413 403 **[tons]**tonnes /annum	28^0 19' 25.69"S $22^0$59' 46.02"E
HL Waste Rock Dump/stockpiles	Disposal of waste - HL Waste Rock Dump/stockpiles	Portion 1 of Beesthoek Farm 448	10 983 334 **[tons]**tonnes /annum	28^0 17' 07.01"S $23^0$01' 08.32"E
GF Waste Rock Dump/stockpiles	Disposal of waste - GF Waste Rock Dump/stockpiles	Portion 1 of Beesthoek Farm 448	7 721 766 **[tons]**tonnes /annum	28^0 17' 3.12"S $23^0$00' 38.58"E
Landfill site	Landfill site	Portion 0 of Beesthoek farm 448	500 000 **[tons]**tonnes /annum	28^0 16' 39.725"S $22^0$59' 40.088"E
Disposal of domestic effluent into sewage sumps	Disposal of domestic effluent into sewage sump at Laundry facility North mine	Portion 0 of Beesthoek Farm 448	163 m^3 30 000m^3/a	28^0 16' 59.53"S $22^0$59' 56.35"E

[END OF LICENCE AMENDMENT]

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Department:
Environment & Nature Conservation
NORTHERN CAPE PROVINCE
REPUBLIC OF SOUTH AFRICA

Private Bag X6102, Kimberley, 8300, Metlife Towers, T-Floor, Tel: 053 807 7300, Fax: 053 807 7328

Equiries : Ms. D Werth
Dipatlisilo :
Navrae :
Imibuzo
Reference:
Tshupelo : NC/BA/11/SIY/TSH/POS/ASS/2013
Verwysing
Isalathiso

Date : 07th March 2014
Letlha:
Datum :
Umhla:

Assmang Iron Ore Beeshoek Mine
Mr. Johan Kleynhans
Beeshoek Iron Ore Mine
P.O. Box Mancorp Mine
Beeshoek
8423

053 – 311 4642
johank@assmang.co.za

Dear Sir

THE GRANTING OF THE ENVIRONMENTAL AUTHORISATION FOR GN.R544: ACTIVITIES 28 AND GN.R 546: ACTIVITY 14: THE PROPOSED ASSMANG BEESHOEK BF WASTE ROCK DUMP EXPANSION,FARM BEESHOEK 448 & FARM OLYN FONTEIN 475, ASSMANGN IRON ORE BEESHOEK MINE CLOSE TO POSTMASBURG, TSANTSABANE LOCAL MUNICIPALITY, ZF MGCAWU DISTRICT MUNICIPALITY, NORTHERN CAPE PROVINCE.

By virtue of the powers conferred to me by the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Regulations, 2010, **THE DEPARTMENT HEREBY GRANTS THE ENVIRONMENTAL AUTHORISATION FOR GN.R544: ACTIVITIES 28 AND GN.R 546: ACTIVITY 14: THE PROPOSED ASSMANG BEESHOEK BF WASTE ROCK DUMP EXPANSION,FARM BEESHOEK 448 & FARM OLYN FONTEIN 475, ASSMANGN IRON ORE BEESHOEK MINE CLOSE TO POSTMASBURG, TSANTSABANE LOCAL MUNICIPALITY, ZF MGCAWU DISTRICT MUNICIPALITY, NORTHERN CAPE PROVINCE.** A detailed description of the activity is given in the **Final Basic Assessment Report dated November 2013** subject to the conditions listed in the environmental authorisation the environmental authorisation and reasons for the decision are attached herewith.In terms of regulation 10(2) of the Environmental Impact Assessment Regulations, 2010, you are instructed to notify all registered interested and affected parties, in writing and within seven (7) calendar days of receiving of this letter, of the Department's decision in respect of your application as well as the provisions regarding the making of appeals that are provided for in the regulations.

Your attention is drawn to Chapter 7 of the Regulations which regulates appeal procedures. Should you / any person affected by this decision wish to appeal any aspect of the decision, you or a person affected by this decision must, *inter alia,* lodge a notice of intention to appeal, as prescribed in regulation 62 of Environmental Impact Assessment Regulations, 2006, with the Member of the Executive Council, Ministry of Environment and Nature Conservation within 10 days of receiving this letter, by means of one of the following methods:

By facsimile: (053) 832 1026;
By post: Private Bag x 6102, Kimberley, 8300 or
By hand: T-Floor, Metlife Towers, Kimberley, 8300.

Should you decide to appeal, you must serve a copy of your notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where, and for what period, the appeal submission will be available for inspection.

Yours faithfully

Mr. B Fisher – Acting Director

Environmental Quality management

Department of Environment and Nature Conservation

DATE OF DECISIONS: 14·03·2014

Cc: GCS (Pty) Ltd

Tanja Bekker/ Tarryn Hendry

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Northern Cape Province
DEPARTMENT OF
ENVIRONMENT & NATURE
CONSERVATION

Porofensi Ya Kapa Bokone
LEFAPHA LA TIKOLOGO LE
TSHOMARELO YA THLAGO

ENVIRONMENTAL AUTHORISATION
in terms of National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2010

Authorisation Register Number:	**Permit 12/2014**
Reference Number:	**NC/BA/11/SIY/TSH/POS/ASS/2013**
Last Amended:	**N/A**
Holder of Authorisation:	**Assmang Iron Ore**
Location of activity:	**Farm Beeshoek 448 & Farm Olyn Fontein 475, Assmang Iron Ore: Beeshoek Mine, Posmasburg, Tsantsabane Local Municipality, ZF Mgcawu Distinct Municipality**

DEFINITIONS

Activity means an activity identified in Government Notice No. R. 544 and No. R. 545 of 2010 as a listed activity.
Applicant means a person who has submitted an application.
Application means an application for an environmental authorization in terms of chapter 3 of the Environmental Impact Assessment Regulations of 2010.
Basic assessment report means a report contemplated in regulation 22.
Environmental Impact Report means a report contemplated in regulation 31 of the Environmental Impact Assessment Regulations of 2010.
EAP means an environmental assessment practitioner as defined in section 1 of the Act.
Interested and affected party means a interested and affected party contemplated in section 24(4)(d) of the Act, and which in terms of that section includes:

- Any person, group of persons or organisation interested in or affected by an activity, and
- Any organ of state that may have jurisdiction over any aspect of the activity.

Public participation process means a process in which potential interested and affected parties are given an opportunity to comment on, or raise issues relevant to, specific matters.
The Act means the National Environmental Management Act, 1998 (Act No. 107 of 1998).

DECISION

The Department is satisfied, on the basis of information available to it and subject to compliance with conditions of this environmental authorisation, that the applicant should be authorised to undertake the activity specified below.

Details regarding the basis on which the Department reached this decision are set out in Annexure

ACTIVITIES AUTHORISED

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2010 the Department hereby authorises –

Assmang Iron Ore

with the following contact details –

Mr. Johannes Petrus Kleynhans
Beeshoek Iron Ore Mine
P.O. BOX Mancorp Mine Beeshoek
Posmasburg
8423

Tel: 053 311 6305
Fax: 053 311 4642

to undertake the following activity (hereafter referred to as "the activity")

The proposed development entails the expansion of the BF Waste Rock Dump on Farm Beeshoek 448 and on Farm Olyn Fontein 475, Posmasburg, which falls within the jurisdiction of Tsantsabane Local Municipality, of ZF Mgcawu District Municipality, with the following co-ordinates (Longitude (E) 22° 59' 7.5", Latitude (S) 28° 18' 59.2") hereafter referred to as "the property".

The granting of this Environmental Authorisation is subject to the conditions set out below.

CONDITIONS

Scope of authorisation:

1. Authorisation of the activity is subject to the conditions contained in this authorisation, which conditions form part of the environmental authorisation and are binding on the holder of the authorisation.

2. The holder of the authorisation shall be responsible for ensuring compliance with the conditions by any person acting on his or her behalf, including but not limited to, an agent, sub-contractor, employee or person rendering a service to the holder of the authorisation.

3. The activity(s) which is authorised must only be carried out at the property indicated above.

4. Any changes to, or deviations from, the project description set out in this authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further authorisation in terms of the regulations.

5. This authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

General conditions:

6. A copy of this authorisation must be kept at the property where the activity will be undertaken. The authorisation must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the authorisation who works or undertakes work at the property.

7. Where any of the applicant's contact details change, including the name of the responsible person, the physical or postal address and/ or telephonic details, the applicant must notify the Department as soon as the new details become known to the applicant.

8. The holder of the authorisation must notify the Department, in writing and within 24 (TWENTY FOUR) hours, if condition 16 of this authorisation cannot be or is not adhered to. In all other cases, the holder of the authorisation must notify the Department, in writing, within 7 (SEVEN) if a condition of this authorisation is not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance.

9. Non-compliance with a condition of this authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the regulations.

10. This authorization is subject to the approval by the relevant local authorities i.e. in terms of any relevant legislation administered by those local authorities.

11. The activity may not commence without the necessary permits/licenses/approvals and/or service agreements, where it is relevant, from or with the relevant regulatory authorities whether national, provincial or local (these include but are not limited to National Department of Environmental Affairs & Tourism, National Department of Agriculture, Department of Housing & Local Government, Department of Water Affairs & Forestry, Department of Minerals and Energy, Department of Transport, Roads & Public Works, Department Arts, Sports & Culture, South African Heritage Resources Agency, South African Civil Aviation Authority).

12. The activity, including site preparation, may not commence before the thirty (30) day appeal period expires or until such time as the Department has considered any appeals that have been lodged.

a. One week's written notice must be given to the Administration clerk (Impact Management Unit) before commencement with the activity.
b. Such notice shall make clear reference to the site location details and the reference number given above.
c. The said notice must also include proof of compliance with the following conditions described herein:
    i. Conditions: 11 and 23

13. The applicable conditions of this authorization must form part of all contractors' and sub-contractors' conditions of contract. A performance-based requirement with regard to environmental impact management must be included in all contracts related to any aspect of this authorization.

14. The applicant must carry out regular environmental audits to establish compliance with the conditions of this authorization and contracts.

15. Records relating to the compliance/non-compliance with the conditions of the authorization and contracts must be kept in good order. Such records must be made available to the Department within 7 (seven) days of receipt of a written request by the Department for such records.

16. Any complaints regarding the said development must be brought to the attention of the Department within 24 hours after receiving the complaint. A complaints register must be kept up to date for inspection by the Department

17. Officials in the employ of the Department shall be given access to the property as described above (see detailed description of the activity) for the purposes of assessing and/or monitoring compliance with the conditions contained in this Record of Decision. Where the activity is located on a third party's property the applicant shall be responsible to arrange access for departmental officials

18. This Department may add to, change and/or amend any of the conditions in this authorization if, in the opinion of the Department, the addition, change of amendment is environmentally justified. In event that such impacts exceed its significance as predicted in the independent consultant's environmental scoping report and supporting documentation, the authorization may be withdrawn after proper procedures were followed.

19. In the event of any dispute concerning the significance of a particular impact, the opinion of this department in respect of its significance will prevail.

20. This Department and any national department, provincial department, local authorities or committees appointed in terms of the conditions of this application or any other public authority or organization shall not be held responsible for any damage of losses suffered by the applicant or his successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the applicant with the conditions of approval as set out in this document or any other subsequent document emanating from these conditions of approval.

21. The applicant shall be responsible for all costs necessary to comply with the above conditions unless otherwise specified.

22. The applicant must apply the principle of best practicable environmental option for all technologies used/ implement

Appeal of authorisation:

23. The holder of the authorisation must notify every registered interested and affected party, in writing and within 7 (SEVEN) calendar days, of receiving notice of the Department's decision to authorise the activity.

24. The notification referred in 23 must –
    - specify the date on which the authorisation was issued;
    - inform the interested and affected party of the appeal procedure provided for in Chapter 7 of the regulations; and
    - advise the interested and affected party that a copy of the authorisation and reasons for the decision will be furnished on request.

25. If the applicant should appeal against this Environmental Authorisation, he/she must inform all interested and affected persons that such an appeal is being lodged with the MEC and if requested, the applicant/appellant must provide those persons with reasonable access to a full copy of the appeal within a reasonable time before expiry of the thirty day appeal period.

Management of activity:

26. The Environmental Management Programme ("EMPr") submitted as part of the application for environmental authorisation must be implemented.

27. The disturbance of the environment must be restricted to the absolute minimum.

Monitoring and Recording

26. A site monitoring must be instituted to the satisfaction of this Department, access routes must be monitored during routine site maintenance visits.

27. This Department retains the right to inspect or monitor the proposed project during both construction and operation, to ensure that it complies with the legislation and the conditions stipulated in this Environmental Authorisation.

28. The holder of the authorisation must submit an environmental audit report to the Department upon the completion of the construction and rehabilitation of the activities. The environmental audit report must-

    - Indicate the date of the audit, the name of the auditor and the outcome of the audit.

    - Records relating to the monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development

29. The applicant must appoint a suitably experienced Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the mitigation / rehabilitation measures and recommendations referred to in this authorisation are implemented.

30. The ECO shall be appointed before commencement of any land clearing or construction activities.

31. The ECO shall keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.

32. The ECO shall remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.

33. Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.

Commissioning of the activity:

34. 14 days written notice must be given to the Department that the activity will commence. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence.

35. The authorised activity shall not commence within thirty (30) days of the date of signature of the authorisation.

36. Should you be notified by the minister of a suspension of the authorisation pending appeal procedures, you shall not commence with the activity unless authorised by the minister in writing.

Operation of the activity:

37. Fourteen (14) days written notice must be given to the Department that the activity operational phase will commence.

38. During operational phase of the development storm-water drainage must be monitored. Must adhere to the Storm Water Management Plan as outlined in the Environmental Management Programme Report.

39. Possible ground water contamination must also be monitored over time.

40. The construction area must be demarcated, no construction activities should be allowed outside proposed footprint.

41. Monitoring of long term soil pollution must be implemented.

42. Pollution creating activities must be minimised

43. Burning of waste on site is strictly prohibited

44. Noise levels must be kept to a minimum during construction phase.

45. Relevant Occupational Health and Safety Standards must be observed all the times.

46. Permits to remove and/or destroy protected tree species (Camel Thorn and Shepperd's Tree) must be form the Department of Forestry Northern Cape.

47. Permits to remove and/or destroy Aloe hereroensis and Pachypodium succulentum must be obtained from the Northern Cape Department of Environment and Nature Conservation.

48. The following conditions are recommended by the plant specialist report should be adhered to at all times.

49. Large geophytes that are listed as a protected species, such as Boophane distyca and Harpagophytum procumbens should be found and rescued during a wetter seasons and transplanted to the buffer zone. A plant specialist must be consulted for the removal and relocation of as many of these geophytic and succulents plants as possible.

50. Relocated individuals of each species to a protected area such as the buffer zone before the commencement of the activities.

Site closure and decommissioning:

51. In case decommissioning of the project, the holder of the Environmental Authorisation must rehabilitate the site to the satisfaction of the Directorate: Environmental Management.

52. At closure the side slopes must have been constructed at an angle of no steeper than 1:3. The Waste Rock Dump must be covered with a course (gravel/topsoil) medium which has been proven successful in the Beeshoek ongoing processes. Should it be determined that the vegetation self-succession does not establish, a growth medium must be placed on top of the rock and vegetation re-establishment.

53. The ecosystem integrity must be promoted

DURATION AND PERIOD OF VALIDITY

This activity(s) must commence within a period of three (3) years from the date of issue. If commencement does not occur within that period and the intention is to extend the validity period of the authorisation, an application for amendment to extend the validity period must launched at least six months before the validity period lapses. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken

APPEAL

In terms of Chapter 7 of Environmental Impact Assessment Regulations, 2010, if the applicant or a person affected by this Decision wishes to appeal this decision, a notice of intention to appeal must be lodged within Twenty (20) days after date of the decision, and an appeal must **be lodged within thirty (30) days after lapsing of 20 days contemplated in regulation 60 (1)** of lodging of the notice to appeal to:

The Member of the Executive Council
Ministry of Environment & Nature Conservation
Private Bag X6102
Kimberley
8300
Fax: (053) 8321026

Appeals must comply with the provisions of Chapter 7 of Environmental Impact Assessment Regulations, 2010 Government Notice No. R. 543 of 18 June 2010.

MR B. FISHER
ACTING - DIRECTOR ENVIRONMENTAL QUALITY MANAGEMENT
DEPARTMENT OF ENVIRONMENT & NATURE CONSERVATION

DATE OF ENVIRONMENTAL AUTHORISATION: 14-03-2014

ANNEXURE 1: REASONS FOR DECISION

1. Background

The applicant, **Assmang Iron Ore: Beeshoek Mine**, applied for authorization to carry on the following activity –

Proposed development of the expansion of existing Waste Rock Dump on Farm Beeshoek 448 and Farm Olyn Fontein 475 at Beeshoek Mine, Posmasburg: the development will entail the following: an expansion of the existing Waste Rock Dump.

Activity No. 28 of GN. R.544 of 18 June 2010:

The expansion of or changes to the existing facilities for any process or activity where such expansion or changes to will result in the need for a permit or license in terms of national or provincial legislation governing the release of emissions or pollution, excluding where the facility, 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 that Act will apply.

Activity No. 14 of GN. R.546 of 18 June 2010:

The clearance of an area of 5 hectares or more of vegetation where 75% or more of the vegetative cover constitutes indigenous vegetation, expect where such removal of vegetation is required for;
(1) purpose of agriculture or afforestation inside areas identified in spatial instruments adopted by the competent authority for agriculture or afforestation purposes;
(2) the undertaking of a process or activity 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 activity is regarded to be excluded from this list;
(3) the undertaking of a linear activity falling below the in Notice 544 of 2010.

2. Information considered in making the decision

In reaching its decision, the Department took, *inter alia,* the following into consideration -

a) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the national Environmental management act, 1998 (Act No. 107 of 1998)
b) The relevant information contained in the Departmental informational base including-
   - Public Participation Guideline 2006.
   - Environmental Impact Management assessment Regulations promulgated in terms of the new Environmental Management Act (No. 107 of 1998)
c) The findings of the site visit undertaken by Mr. J. P. Kleynhans, L. Groenewald, D Werth, on 03 October 2013.

3. Key factors considered in making the decision

All information presented to the Department was taken into account in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below.

a) The legal and procedural requirements have been complied and the information contained in the document is to the satisfaction of the Department.
b) The Basic Assessment report findings given the nature of the project, concludes that the potential impact associated with the proposed development area of a nature and extent that can be reduced.

4. Findings

After consideration of the information and factors listed above, the Department made the following findings –

a) The environmental impacts associated with the proposed project can be reduced to acceptable levels if properly managed.
b) Adequate Public Participation Process took place.
c) The legal and procedural requirements have been complied with and the information contained in the Basic Assessment Report and Appendices is to the satisfaction of the Department.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the proposed activity will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental impacts resulting from the proposed activity can be mitigated to acceptable levels. The application is accordingly granted.

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Department:
Environment & Nature Conservation
NORTHERN CAPE PROVINCE
REPUBLIC OF SOUTH AFRICA

Private Bag X6102, Kimberley, 8300, Metlife Towers, T-Floor, Tel: 053 807 7300, Fax: 053 807 7328

Equiries : Mr. O Riba
Dipatlisiso :
Navrae :
Imibuzo
Reference
Tshupelo : NC/BA/29/ZFM/TSA/POS3/2014
Verwysing
Isalathiso

Date :
Letlha : 03rd June 2015
Datum :
Umhla :

Assmang Iron Ore Beeshoek Mine
Mr. Johan Kleynhans
P.O. Box Mancorp Mine
Beeshoek
8423

Johan.kleynhans@assmang.co.za
053 – 311 4642

Dear Sir/Madam

THE GRANTING OF THE ENVIRONMENTAL AUTHORISATION FOR GN.R544: ACTIVITIES: 22 (i) (ii) (iii) & GN. R 546: ACTIVITY 14 (1) (2) (3): BEESHOEK – WASTE ROCK DUMP VILLAGE HAUL ROAD, AT FARM BEESHOEK 448 & FARM OLYNFONTEIN 475, TSANTSABANE LOCAL MUNCIPALITY, ZF MGCAWU DISTRICT MUNICIPALITY, NORTHERN CAPE PROVINCE.

By virtue of the powers conferred to me by the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Regulations, 2010, **THE DEPARTMENT HEREBY GRANTS THE ENVIRONMENTAL AUTHORISATION FOR GN.R544: ACTIVITIES: 22 (i) (ii) (iii) & GN. R 546: ACTIVITY 14 (1) (2) (3): BEESHOEK – WASTE ROCK DUMP VILLAGE HAUL ROAD, AT FARM BEESHOEK 448 & FARM OLYNFONTEIN 475, TSANTSABANE LOCAL MUNCIPALITY, ZF MGCAWU DISTRICT MUNICIPALITY, NORTHERN CAPE PROVINCE.** A detailed description of the activity is given in the Basic Assessment Report dated December 2014 subject to the conditions listed in the environmental authorisation and reasons for the decision are attached herewith.In terms of regulation 10(2) of the Environmental Impact Assessment Regulations, 2010, you are instructed to notify all registered interested and affected parties, in writing and within twelve (12) calendar days of receiving of this letter, of the Department's decision in respect of your application as well as the provisions regarding the making of appeals that are provided for in the regulations.

Your attention is drawn to Chapter 7 of the Regulations which regulates appeal procedures. Should you / any person affected by this decision wish to appeal any aspect of the decision, you or a person affected by this decision must, *inter alia,* lodge a notice of intention to appeal, as prescribed in regulation 62 of Environmental Impact Assessment Regulations, 2010, with the Member of the Executive Council, Ministry of Environment and Nature Conservation within 20 days of receiving this letter, by means of one of the following methods:

By facsimile:	(053) 832 1026;
By post:	Private Bag x 6102, Kimberley, 8300 or
By hand:	T-Floor, Metlife Towers, Kimberley, 8300.

Should you decide to appeal, you must serve a copy of your notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where, and for what period, the appeal submission will be available for inspection.

Yours faithfully

MR. B FISHER – ACTING DIRECTOR
ENVIRONMENTAL QUALITY MANAGEMENT
DEPARTMENT OF ENVIRONMENT AND NATURE CONSERVATION

DATE OF DECISION: 19·6·2015

Cc: **GCS – Water & Environmental**
Jane Mahaba
janem@gcs-sa.biz
011 – 803 5745

Northern Cape Province
DEPARTMENT OF
ENVIRONMENT & NATURE
CONSERVATION

Porofensi Ya Kapa Bokone
LEFAPHA LA TIKOLOGO LE
TSHOMARELO YA THLAGO

ENVIRONMENTAL AUTHORISATION

in terms of National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2010

Authorisation Register Number:	Permit 20/2015
Reference Number:	NC/BA/29/ZFM/TSA/POS3/2014
Last Amended:	N/A
Holder of Authorisation:	Assmang Iron Ore: Beeshoek Mine
Location of activity:	Farm Beeshoek 448 and Farm Olynfontein 475, Tsantsabane Local Municipality, Northern Cape Province.

DEFINITIONS

Activity means an activity identified in Government Notice No. R. 544 and No. R. 545 of 2010 as a listed activity.
Applicant means a person who has submitted an application.
Application means an application for an environmental authorization in terms of chapter 3 of the Environmental Impact Assessment Regulations of 2010.
Basic assessment report means a report contemplated in regulation 22.
Environmental Impact Report means a report contemplated in regulation 31 of the Environmental Impact Assessment Regulations of 2010.
EAP means an environmental assessment practitioner as defined in section 1 of the Act.
Interested and affected party means a interested and affected party contemplated in section 24(4) (d) of the Act, and which in terms of that section includes:

- Any person, group of persons or organisation interested in or affected by an activity, and
- Any organ of state that may have jurisdiction over any aspect of the activity.

Public participation process means a process in which potential interested and affected parties are given an opportunity to comment on, or raise issues relevant to, specific matters.
The Act means the National Environmental Management Act, 1998 (Act No. 107 of 1998).

DECISION

The Department is satisfied, on the basis of information available to it and subject to compliance with conditions of this environmental authorisation, that the applicant should be authorised to undertake the activity specified below.

Details regarding the basis on which the Department reached this decision are set out in Annexure 1.

ACTIVITIES AUTHORISED

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations, 2010 the Department hereby authorises –

Assmang Iron Ore: Beeshoek Mine

with the following contact details –

Mr Johan Kleynhans
Beeshoek Iron Ore Mine
P.O. Box Mancorp Mine
BEESHOEK
8423

Tel: (053) 311 6305
Fax: (053) 311 4642
E-mail: johan.kleynhans@assmang.co.za

to undertake the following activities (hereafter referred to as "the activity")

Beeshoek Waste Rock Dump-Village Haul Road

Activity No. 22 of GN. R.544 of 18 June 2010

The construction of a road, outside urban areas,
(i) with a reserve wider than 13,5 meters or,
(ii) where no reserve exists where the road is wider than 8 metres, or

(iii) 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 Notice 545 of 2010.

Activity No. 14 of GN. R.546 of 18 June 2010

The clearance of an area of 5 hectares or more of vegetation where 75% or more of the vegetation cover constitute indigenous vegetation, except where such removal of vegetation is required for:

(1) purpose of agriculture or afforestation inside areas identified in spatial instruments adopted by the competent authority for agriculture or afforestation purpose;
(2) the undertaking of a process or activity 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 of2008) in which case the activity is regarded to be excluded from this list;
(3) the undertaking of a linear activity falling below the thresholds in Notice 544 of 2010.

At farm Beeshoek 448 and farm Olynfontein 475 which falls within the jurisdiction of Tsantsabane Local Municipality, of ZF Mgcawu District Municipality, with the following co-ordinates;

(Latitude (S) 22° 59′ 24″ Longitude (E) 28° 18′ 7.2″)
(Latitude (S) 22° 59′ 20.42″ Longitude (E) 28° 18′ 32.4″)
(Latitude (S) 22° 59′ 27.6″ Longitude (E) 28° 18′ 54″)

hereafter referred to as "the property".

The granting of this Environmental Authorisation is subject to the conditions set out below.

CONDITIONS

Scope of authorisation:

1. Authorisation of the activity is subject to the conditions contained in this authorisation, which conditions form part of the environmental authorisation and are binding on the holder of the authorisation.

2. The holder of the authorisation shall be responsible for ensuring compliance with the conditions by any person acting on his or her behalf, including but not limited to, an agent, sub-contractor, employee or person rendering a service to the holder of the authorisation.

3. The activity(s) which is authorised must only be carried out at the property indicated above.

4. Any changes to, or deviations from, the project description set out in this authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further authorisation in terms of the regulations.

5. This authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

General conditions:

6. A copy of this authorisation must be kept at the property where the activity will be undertaken. The authorisation must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the authorisation who works or undertakes work at the property.

7. Where any of the applicant's contact details change, including the name of the responsible person, the physical or postal address and/ or telephonic

details, the applicant must notify the Department as soon as the new details become known to the applicant.

8. The holder of the authorisation must notify the Department, in writing and within 24 (TWENTY FOUR) hours, if condition 16 of this authorisation cannot be or is not adhered to. In all other cases, the holder of the authorisation must notify the Department, in writing, within 7 (SEVEN) days if a condition of this authorisation is not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance.

9. Non-compliance with a condition of this authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the regulations.

10. This authorization is subject to the approval by the relevant local authorities i.e. in terms of any relevant legislation administered by those local authorities.

11. The activity may not commence without the necessary permits/licenses/approvals and/or service agreements, where it is relevant, from or with the relevant regulatory authorities whether national, provincial or local (these include but are not limited to National Department of Environmental Affairs, National Department of Agriculture, Forestry and Fisheries, Department of Housing & Local Government, Department of Water and Sanitation, Department of Mineral Resources, Department of Transport, Department of Roads & Public Works, Department Arts, Sports & Culture, South African Heritage Resources Agency, South African Civil Aviation Authority).

12. The activity, including site preparation, may not commence before the thirty (30) day appeal period expires or until such time as the Department has considered any appeals that have been lodged.

    a. One week's written notice must be given to the Administration clerk (Impact Management Unit) before commencement with the activity.
    b. Such notice shall make clear reference to the site location details and the reference number given above.

c. The said notice must also include proof of compliance with the following conditions described herein:
    i. Conditions: 11 and 23.

13. The applicable conditions of this authorization must form part of all contractors' and sub-contractors' conditions of contract. A performance-based requirement with regard to environmental impact management must be included in all contracts related to any aspect of this authorization.

14. The applicant must carry out regular environmental audits to establish compliance with the conditions of this authorization and contracts.

15. Records relating to the compliance/non-compliance with the conditions of the authorization and contracts must be kept in good order. Such records must be made available to the Department within 7 (seven) days of receipt of a written request by the Department for such records.

16. Any complaints regarding the said development must be brought to the attention of the Department within 24 (twenty four) hours after receiving the complaint. A complaints register must be kept up to date for inspection by the Department

17. Officials in the employ of the Department shall be given access to the property as described above (see detailed description of the activity) for the purposes of assessing and/or monitoring compliance with the conditions contained in this Environmental Authorization. Where the activity is located on a third party's property the applicant shall be responsible to arrange access for departmental officials

18. This Department may add to, change and/or amend any of the conditions in this authorization if, in the opinion of the Department, the addition, change of amendment is environmentally justified. In event that such impacts exceed its significance as predicted in the independent consultant's environmental scoping report and supporting documentation, the authorization may be withdrawn after proper procedures were followed.

19. In the event of any dispute concerning the significance of a particular impact, the opinion of this department in respect of its significance will prevail.

20. This Department and any national department, provincial department, local authorities or committees appointed in terms of the conditions of this application or any other public authority or organization shall not be held responsible for any damage of losses suffered by the applicant or his successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the applicant with the conditions of approval as set out in this document or any other subsequent document emanating from these conditions of approval.

21. The applicant shall be responsible for all costs necessary to comply with the above conditions unless otherwise specified.

22. The applicant must apply the principle of best practicable environmental option for all technologies used/ implemented.

Appeal of authorisation:

23. The holder of the authorisation must notify every registered interested and affected party, in writing and within 7 (SEVEN) calendar days, of receiving notice of the Department's decision to authorise the activity.

24. The notification referred in 23 must –
    - specify the date on which the authorisation was issued;
    - inform the interested and affected party of the appeal procedure provided for in Chapter 7 of the regulations; and
    - advise the interested and affected party that a copy of the authorisation and reasons for the decision will be furnished on request.

25. If the applicant should appeal against this Environmental Authorisation, he/she must inform all interested and affected persons that such an appeal is being lodged with the MEC and if requested, the applicant/appellant must provide those persons with reasonable access to a full copy of the appeal within a reasonable time before expiry of the thirty day appeal period.

Management of activity:

26. The Environmental Management Programme ("EMPr") submitted as part of the application for environmental authorisation must be implemented.

27. The Environmental Management Programmes is a living document and must be updated as determined or required.

28. The disturbance of the environment must be restricted to the absolute minimum.

Monitoring and Recording

26. A site monitoring must be instituted to the satisfaction of this Department, access routes must be monitored during routine site maintenance visits.

27. This Department retains the right to inspect or monitor the proposed project during both construction and operation, to ensure that it complies with the legislation and the conditions stipulated in this Environmental Authorisation.

28. The holder of the authorisation must submit an environmental audit report to the Department upon the completion of the construction and rehabilitation of the activities. The environmental audit report must-

    - Indicate the date of the audit, the name of the auditor and the outcome of the audit.

    - Records relating to the monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development

29. The applicant must appoint a suitably experienced Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that the mitigation / rehabilitation measures and recommendations referred to in this authorisation are implemented.

30. The ECO shall be appointed before commencement of any land clearing or construction activities.

31. The ECO shall keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.

32. The ECO shall remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.

33. Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.

Commissioning of the activity:

34. Fourteen (14) days written notice must be given to the department that the activity will commence. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence.

35. The authorised activity shall not commence within thirty (30) days of the date of signature of the authorisation.

36. Should you be notified by the minister of a suspension of the authorisation pending appeal procedures, you shall not commence with the activity unless authorised by the minister in writing.

Operation of the activity:

37. Fourteen (14) days written notice must be given to the Department that the activity operational phase will commence.

38. Any waste generated during construction and operation phase must be disposed off at a waste disposal site licensed for such waste.

39. No on-site burning or burying of solid waste is permitted.

40. The construction area must be demarcated, no construction or dumping activities should be allowed outside the proposed footprint

41. The removal of natural vegetation must be limited to the footprint of the proposed development.

42. The destruction/ or disturbance of individual protected trees must be avoided during the construction of the proposed haul road. Alternatively a permit for the removal of any protected species must be applied for and granted by the relevant authority.

43. The necessary flora permits must applied for and granted by the Northern Cape Department of Environment and Nature Conservation for all plant species protected under the Northern Cape Nature Conservation Act, 2009 (Act No. 9 of 2009) should they be found existing on site.

44. Any spillages of diesel and oil must be reported and cleared up immediately. In the event of oil or diesel spills, the contaminated soil must be placed in a waste skip and disposed-off at a licensed land fill site for such material.

45. Ensure that soil compaction is limited to the proposed footprint of the activity.

46. Ensure that during the construction and operational phase the proposed haul road is wetted to minimise fugitive dust emissions.

47. Dust control measures must be implemented during clearing phase and must comply with the dust regulations promulgated under the Air Quality Act, 2004 (Act 39 of 2004).

48. If any new evidence of archaeological sites or artefacts, paleontological fossils, graves or other heritage resources is found during development or construction, SAHRA and an archaeologist and/or palaeontologist, depending on the nature of the resources found, must be alerted immediately.

49. The spreading of declared weedy and alien invasive plant species must be controlled and monitored at all times.

50. All mitigation measures detailed in the Environmental Management Programme report must be implemented.

Site closure and decommissioning:

51. In case of decommissioning of the project, the holder of the Environmental Authorisation must properly rehabilitate the site to the satisfaction of the Directorate: Environmental Quality Management.

52. The ecosystem integrity must be promoted at all times.

DURATION AND PERIOD OF VALIDITY

This activity(s) must commence within a period of three (3) years from the date of issue. If commencement does not occur within that period and the intention is to extend the validity period of the authorisation, an application for amendment to extend the validity period must launched at least six months before the validity period lapses. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorization must be made in order for the activity to be undertaken.

APPEAL

In terms of Chapter 7 of Environmental Impact Assessment Regulations, 2010, if the applicant or a person affected by this Decision wishes to appeal this decision, a notice of intention to appeal must be lodged within Twenty (20) days after date of the decision, and an appeal must **be lodged within thirty (30) days after lapsing of 20 days contemplated in regulation 60 (1)** of lodging of the notice to appeal to:

The Member of the Executive Council
Ministry of Environment & Nature Conservation
Private Bag X6102
Kimberley
8300
Fax: (053) 832 1026

Appeals must comply with the provisions of Chapter 7 of Environmental Impact Assessment Regulations, 2010 Government Notice No. R. 543 of 18 June 2010.

MR B. FISHER
DIRECTOR ENVIRONMENTAL QUALITY MANAGEMENT
DEPARTMENT OF ENVIRONMENT & NATURE CONSERVATION

DATE OF ENVIRONMENTAL AUTHORISATION: 19.6.2015

ANNEXURE 1: REASONS FOR DECISION

1. Background

The applicant, **Assmang Iron Ore: Beeshoek Mine**, applied for authorization to carry on the following activity –

Beeshoek Waste Rock Dump-Village Haul Road

Activity No. 22 of GN. R.544 of 18 June 2010

The construction of a road, outside urban areas,

(i) with a reserve wider than 13,5 meters or,
(ii) where no reserve exists where the road is wider than 8 metres, or
(iii) 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 Notice 545 of 2010.

Activity No. 14 of GN. R.546 of 18 June 2010

The clearance of an area of 5 hectares or more of vegetation where 75% or more of the vegetation cover constitute indigenous vegetation, except where such removal of vegetation is required for:

(1) purpose of agriculture or afforestation inside areas identified in spatial instruments adopted by the competent authority for agriculture or afforestation purpose;
(2) the undertaking of a process or activity 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 of2008) in which case the activity is regarded to be excluded from this list;
(3) the undertaking of a linear activity falling below the thresholds in Notice 544 of 2010.

At farm Beeshoek 448 and farm Olynfontein 475 which falls within the jurisdiction of Tsantsabane Local Municipality, of ZF Mgcawu District Municipality, with the following co-ordinates:

(Latitude (S) 22° 59' 24" Longitude (E) 28° 18' 7.2")
(Latitude (S) 22° 59' 20.42" Longitude (E) 28° 18' 32.4")
(Latitude (S) 22° 59' 27.6" Longitude (E) 28° 18' 54")

hereafter referred to as "the property".

The applicant appointed GCS (Pty) Ltd to undertake an environmental impact assessment process.

Basic Assessment was followed.

2. Information considered in making the decision

In reaching its decision, the Department took, *inter alia,* the following into consideration -

a) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998)
b) The relevant information contained in the Basic Assessment Report including-
   - Public Participation Process.
   - Environmental Impact Management Assessment Regulations promulgated in terms of the new Environmental Management Act, 1998 (No. 107 of 1998)
c) The findings of the site visit undertaken by Mr Ordain Riba, Mr Thulani Mthombeni, Mr Peter Mongwato and Mr Johan Kleynhans on 27 May 2015.

3. Key factors considered in making the decision

All information presented to the Department was taken into account in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below.

a) The legal and procedural requirements have been complied and the information contained in the Basic Assessment report is to the satisfaction of the department.
b) The Basic Assessment Report findings given the nature of the project, concludes that the potential impact associated with the proposed

development area of a nature and extent that can be reduced to an acceptable level.

4. Findings

After consideration of the information and factors listed above, the Department made the following findings –

a) The environmental impacts associated with the proposed project can be reduced to acceptable levels if properly managed.
b) Adequate Public Participation Process took place.
c) The legal and procedural requirements have been complied with and the information contained in the Basic Assessment Report and Appendices is to the satisfaction of this department.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the proposed activity will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental impacts resulting from the proposed activity can be mitigated to acceptable levels. The application is accordingly granted.

Annexure 5: Screening Report

SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION OR FOR A PART TWO AMENDMENT OF AN ENVIRONMENTAL AUTHORISATION AS REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED SITE ENVIRONMENTAL SENSITIVITY

EIA Reference number: 223MR

Project name: Beeshoek Mine Expansion Project

Project title: Beeshoek Mine Expansion Project

Date screening report generated: 19/11/2019 10:43:43

Applicant: Assmang Pty Ltd Beeshoek Iron Ore Mine

Compiler: EnviroGistics

Compiler signature:

……

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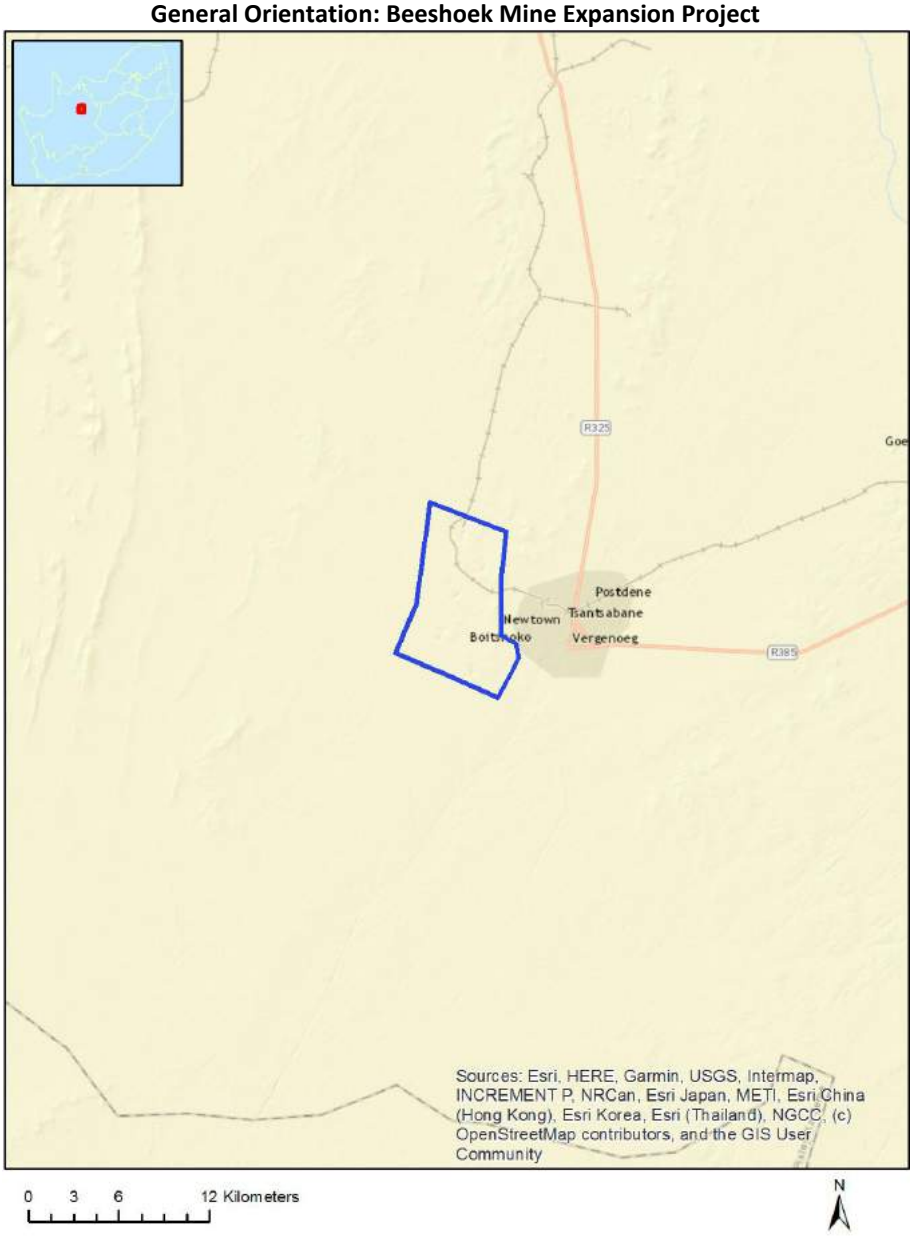
Proposed Project Location

Orientation map 1: General location

General Orientation: Beeshoek Mine Expansion Project



Map of proposed site and relevant area(s)

Cadastral details of the proposed site

Property details:

No	Farm Name	Farm/ Erf No	Portion	Latitude	Longitude	Property Type
1	BEESTHOEK	448	0	28°17'29.21S	23°0'0.41E	Farm
2	DOORN FONTEIN	446	0	28°13'47.85S	22°59'59.81E	Farm
3	PLOEG FONTEIN	487	0	28°21'33S	22°59'19.76E	Farm
4	OLYN FONTEIN	475	0	28°20'16.54S	23°0'29.91E	Farm
5	BEESTHOEK	448	10	28°16'41.5S	22°59'49.62E	Farm Portion
6	BEESTHOEK	448	11	28°16'55.05S	22°59'46.77E	Farm Portion
7	BEESTHOEK	448	1	28°18'1.34S	23°0'33.3E	Farm Portion
8	OLYN FONTEIN	475	6	28°20'12.74S	23°2'26.11E	Farm Portion
9	BEESTHOEK	448	1	28°16'56.91S	23°0'47.94E	Farm Portion
10	BEESTHOEK	448	9	28°15'48.16S	23°0'9.58E	Farm Portion
11	BEESTHOEK	448	1	28°15'47.05S	23°0'9.4E	Farm Portion
12	BEESTHOEK	448	8	28°16'31.27S	22°59'41.58E	Farm Portion
13	BEESTHOEK	448	1	28°16'16.38S	23°0'0.1E	Farm Portion
14	OLYN FONTEIN	475	2	28°21'1.61S	23°2'28.63E	Farm Portion
15	DOORN FONTEIN	446	0	28°13'38.76S	22°59'11.58E	Farm Portion
16	BEESTHOEK	448	3	28°18'17.17S	23°1'20.77E	Farm Portion
17	BEESTHOEK	448	5	28°17'31.38S	22°59'43.62E	Farm Portion
18	BEESTHOEK	448	7	28°17'31.38S	23°0'7.96E	Farm Portion
19	BEESTHOEK	448	0	28°16'11.89S	22°59'51.01E	Farm Portion
20	BEESTHOEK	448	12	28°16'22.14S	23°0'1.74E	Farm Portion
21	DOORN FONTEIN	446	0	28°15'45.98S	23°0'13.91E	Farm Portion
22	DOORN FONTEIN	446	4	28°15'43.44S	23°0'14.96E	Farm Portion
23	BEESTHOEK	448	4	28°16'25.84S	22°59'48.56E	Farm Portion
24	BEESTHOEK	448	6	28°17'19.65S	22°59'53.79E	Farm Portion
25	DOORN	446	0	28°14'3.76S	23°1'39.87E	Farm Portion

	FONTEIN					
26	BEESTHOEK	448	2	28°17'19.28S	22°59'54.49E	Farm Portion
27	BEESTHOEK	448	0	28°16'37.85S	22°59'44.43E	Farm Portion
28	BEESTHOEK	448	1	28°16'49.82S	22°59'48.91E	Farm Portion
29	DOORN FONTEIN	446	5	28°15'44.36S	23°0'16.04E	Farm Portion
30	PLOEG FONTEIN	487	0	28°21'34.29S	22°59'22.91E	Farm Portion
31	OLYN FONTEIN	475	4	28°20'2.03S	22°59'52.78E	Farm Portion
32	BEESTHOEK	448	0	28°17'51.48S	22°59'16.08E	Farm Portion

Development footprint[1] vertices:
No development footprint(s) specified.

Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

No	EIA Reference No	Classification	Status of application	Distance from proposed area (km)
1	12/12/20/2252/1	Solar CSP	Approved	29.5
2	12/12/20/2252/2	Solar CSP	Approved	22.1
3	14/12/16/3/3/2/698	Solar PV	Approved	17.3

Environmental Management Frameworks relevant to the application

Environme	LINK

[1] "development footprint", means the area within the site on which the development will take place and incudes all ancillary developments for example roads, power lines, boundary walls, paving etc. which require vegetation clearance or which will be disturbed and for which the application has been submitted.

ntal Management Framework	
Siyanda District Municipality EMF	https://screening.environment.gov.za/ScreeningDownloads/EMF/SIYANDA_EMF_REPORT_2008.doc

Environmental screening results and assessment outcomes

The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmental sensitive features on the site based on the site sensitivity screening results for the application classification that was selected. The application classification selected for this report is: Mining|Mining Right|Mining - Mining Right.

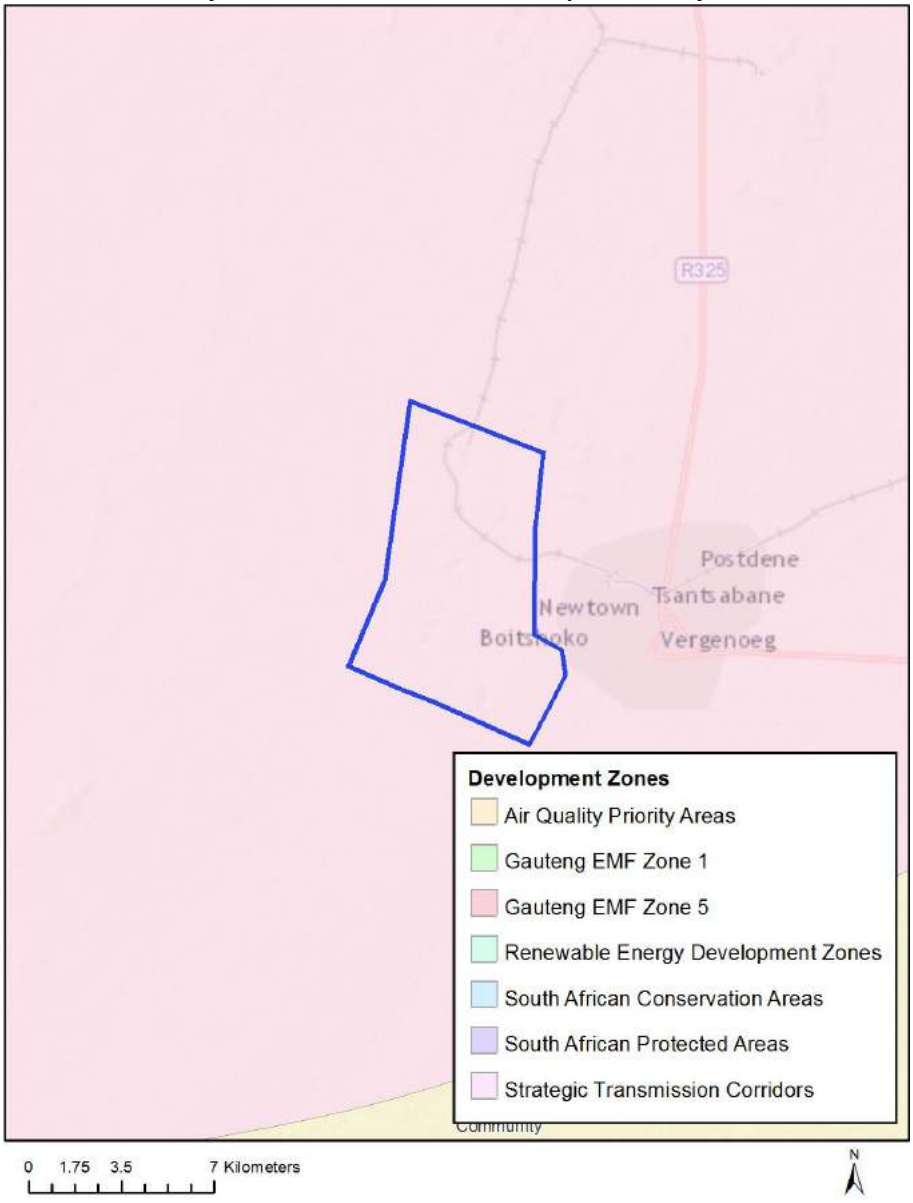
Relevant development incentives, restrictions, exclusions or prohibitions

The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this site are indicated below.

Incentive, restriction or prohibition	Implication
Strategic Transmission Corridor-Northern corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/GNR_350_of_13_April_2017.pdf

Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones

Project Location: Beeshoek Mine Expansion Project



Proposed Development Area Environmental Sensitivity

The following summary of the development site environmental sensitivities is identified. Only the highest environmental sensitivity is indicated. The footprint environmental sensitivities for the proposed development footprint as identified, are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed.

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme			X	
Aquatic Biodiversity Theme				X

Archaeological and Cultural Heritage Theme			X	
Civil Aviation Theme		X		
Paleontology Theme		X		
Plant Species Theme			X	
Defence Theme				X
Terrestrial Biodiversity Theme	X			

Specialist assessments identified

Based on the selected classification, and the environmental sensitivities of the proposed development footprint, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation.

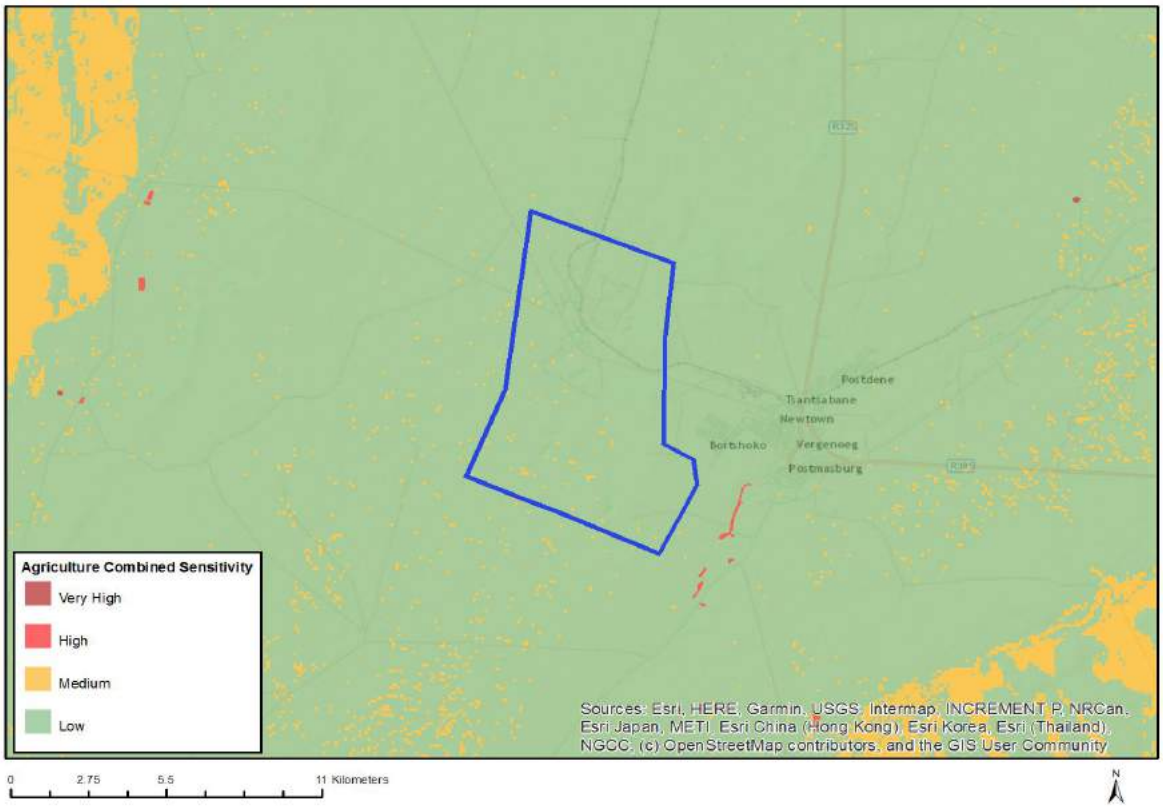
No	Specialist assessment	Assessment Protocol
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Agriculture_Assessment_Protocols.pdf
2	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
3	Archaeological and Cultural Heritage Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
4	Palaeontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
5	Terrestrial Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf
6	Aquatic Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Aquatic_Biodiversity_Assessment.pdf
7	Hydrology	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols

	Assessment	/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
8	Noise Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Noise_Impacts_Assessment_Protocols.pdf
9	Radioactivity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
10	Traffic Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
11	Geotechnical Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
12	Climate Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
13	Health Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
14	Socio-Economic Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
15	Ambient Air Quality Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
16	Seismicity Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
17	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf
18	Animal Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf

Results of the environmental sensitivity of the proposed area.

The following section represents the results of the screening for environmental sensitivity of the proposed site for relevant environmental themes associated with the project classification. It is the duty of the EAP to ensure that the environmental themes provided by the screening tool are comprehensive and complete for the project. Refer to the disclaimer.

MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY

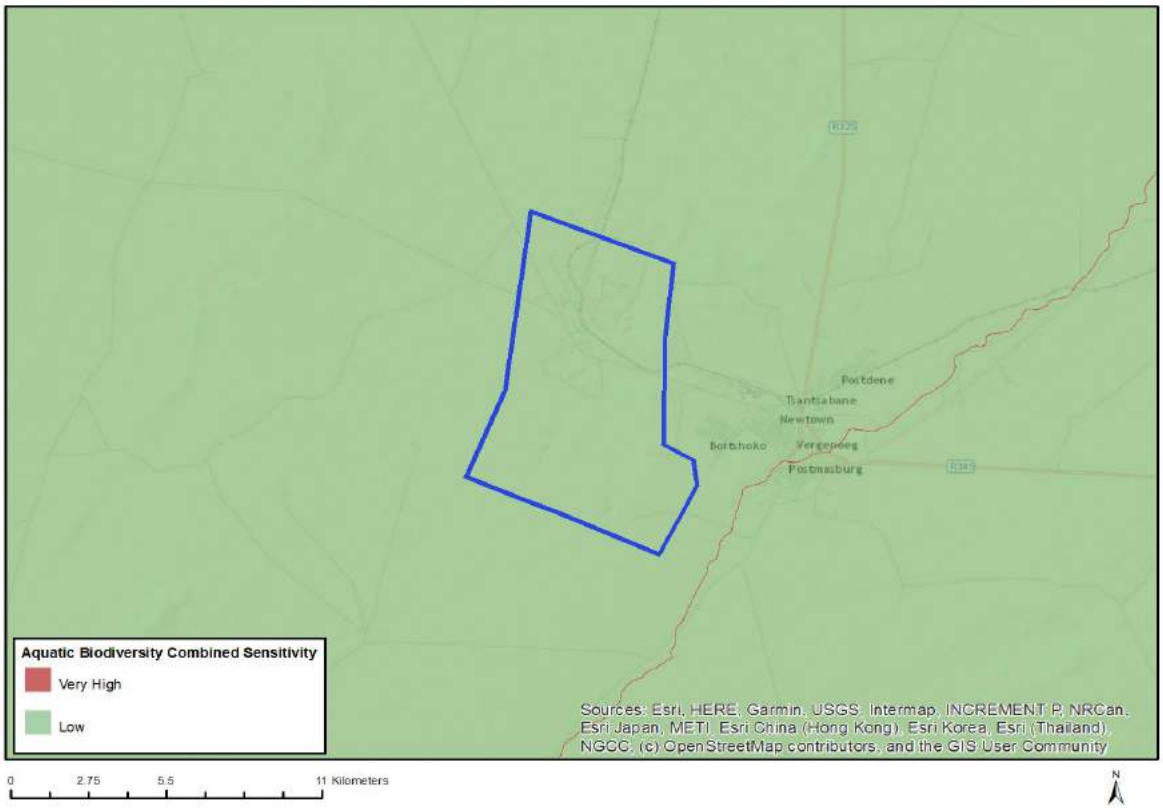


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Low	Land capability;01. Very low/02. Very low/03. Low-Very low/04. Low-Very low/05. Low
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

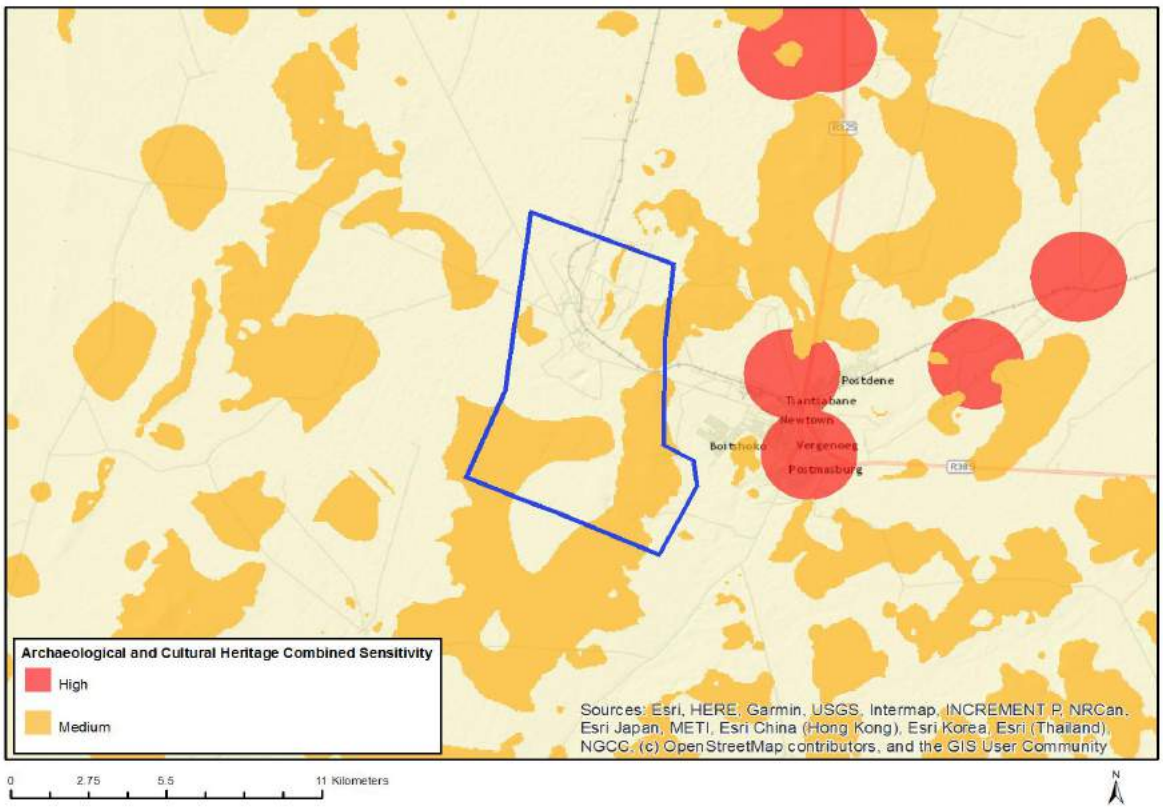


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity Areas

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

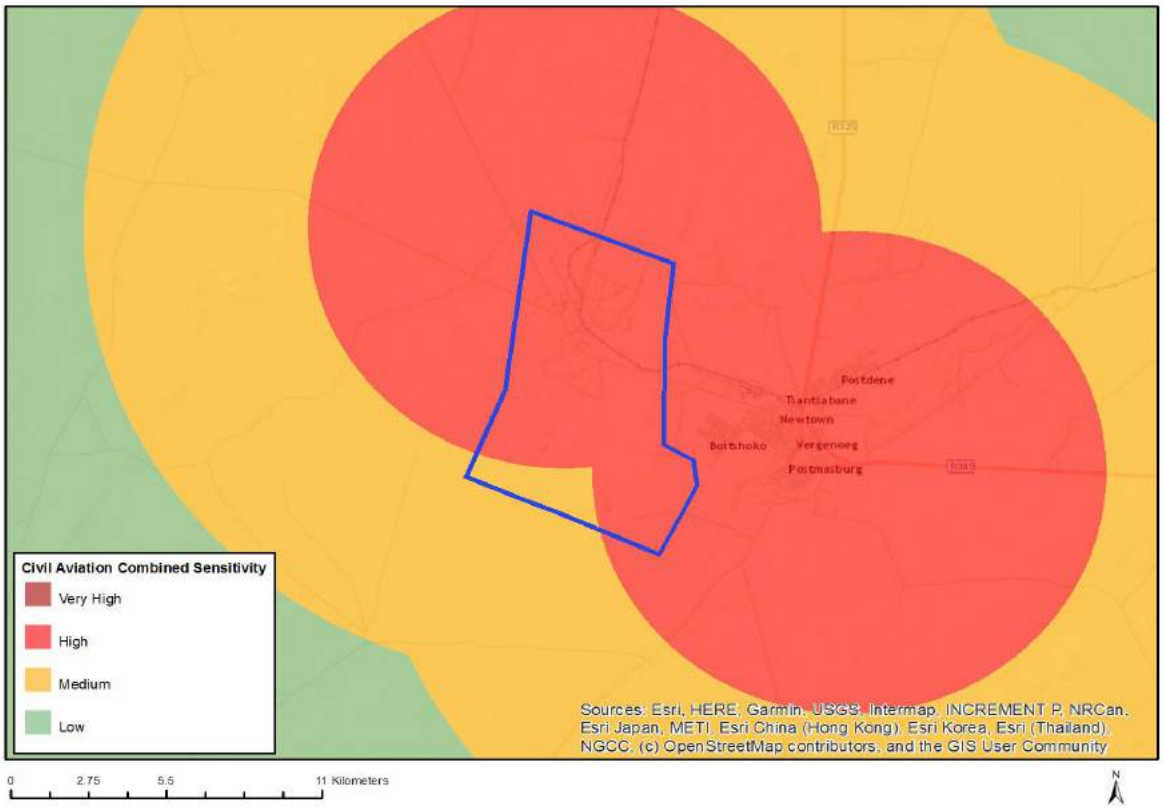


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Mountain or ridge

MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

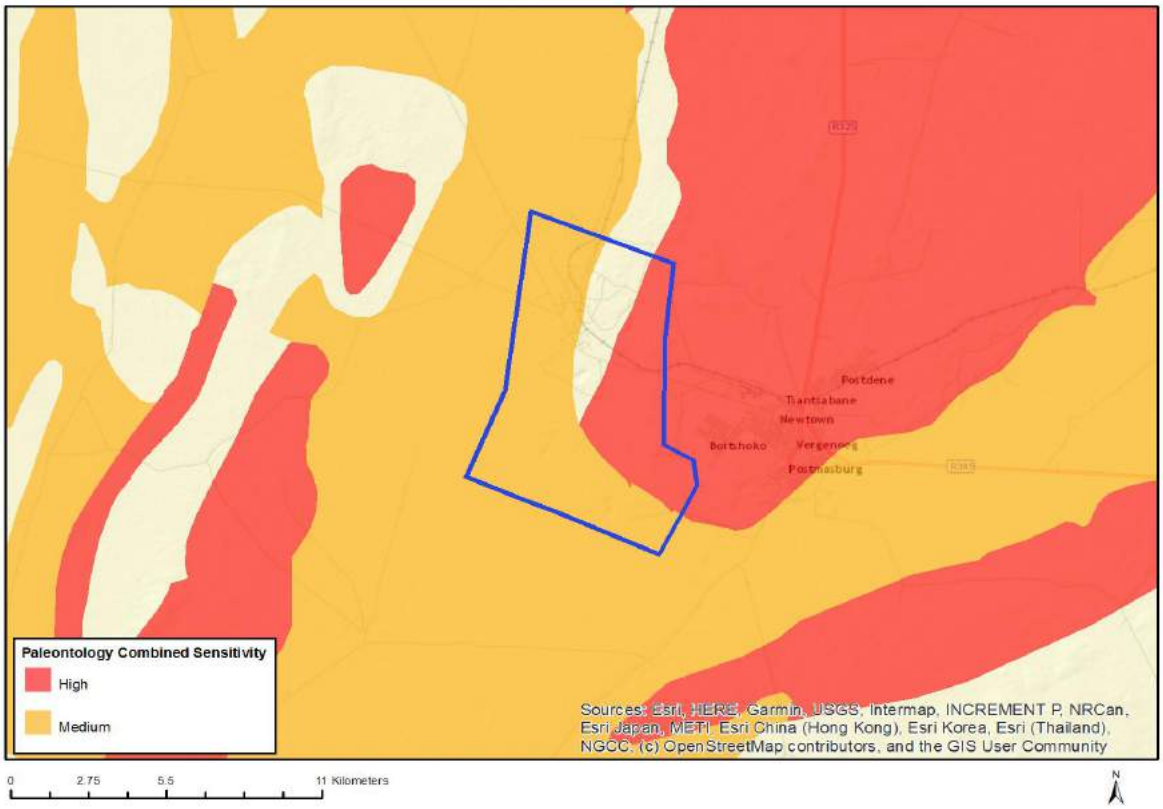


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Within 8 km of other civil aviation aerodrome
Medium	Between 8 and 15 km of other civil aviation aerodrome

MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

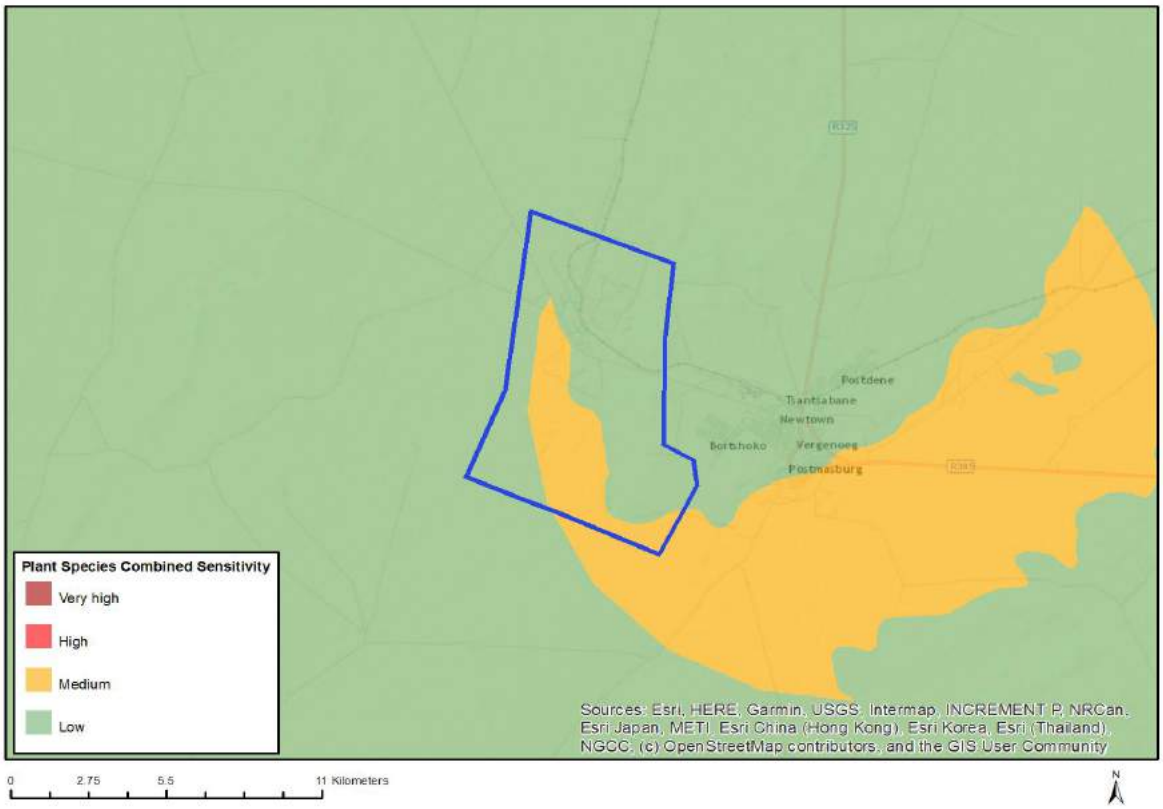


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Features:

Sensitivity	Feature(s)
High	Rock units with a high paleontological sensitivity
Medium	Rock units with a medium paleontological sensitivity

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY

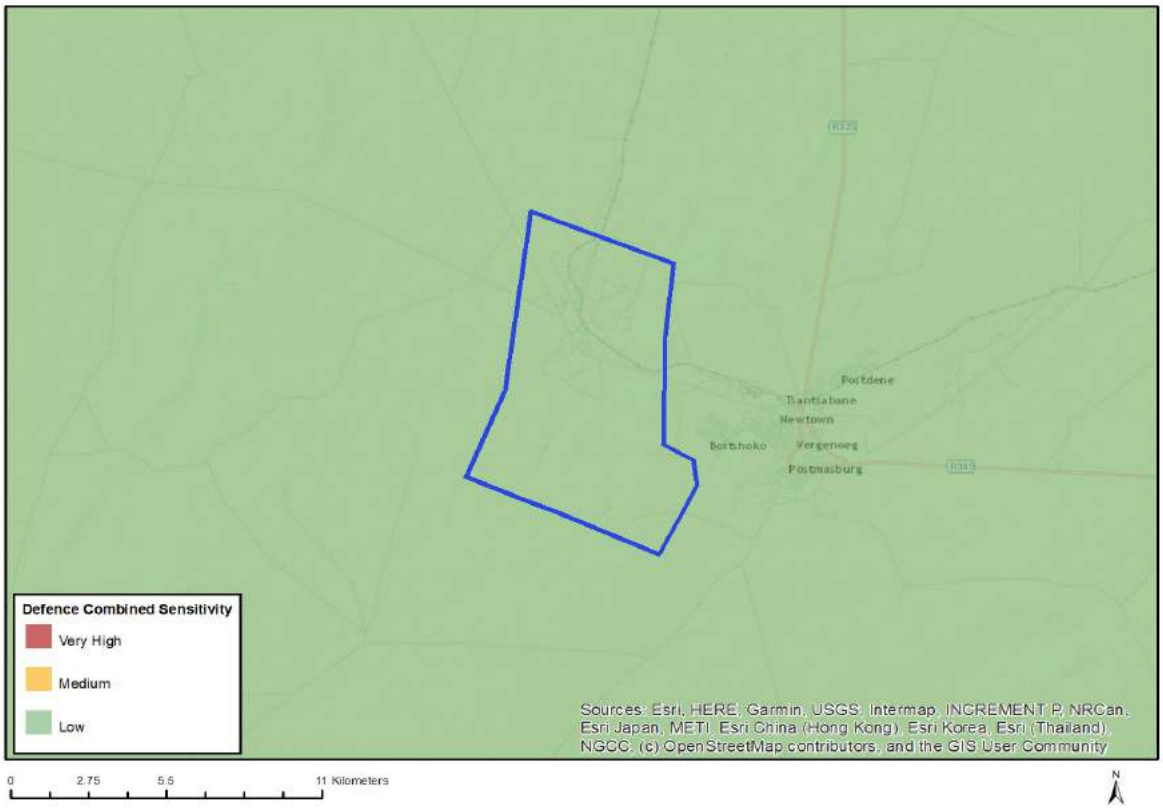


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity
Medium	Sensitive species 58

MAP OF RELATIVE DEFENCE THEME SENSITIVITY

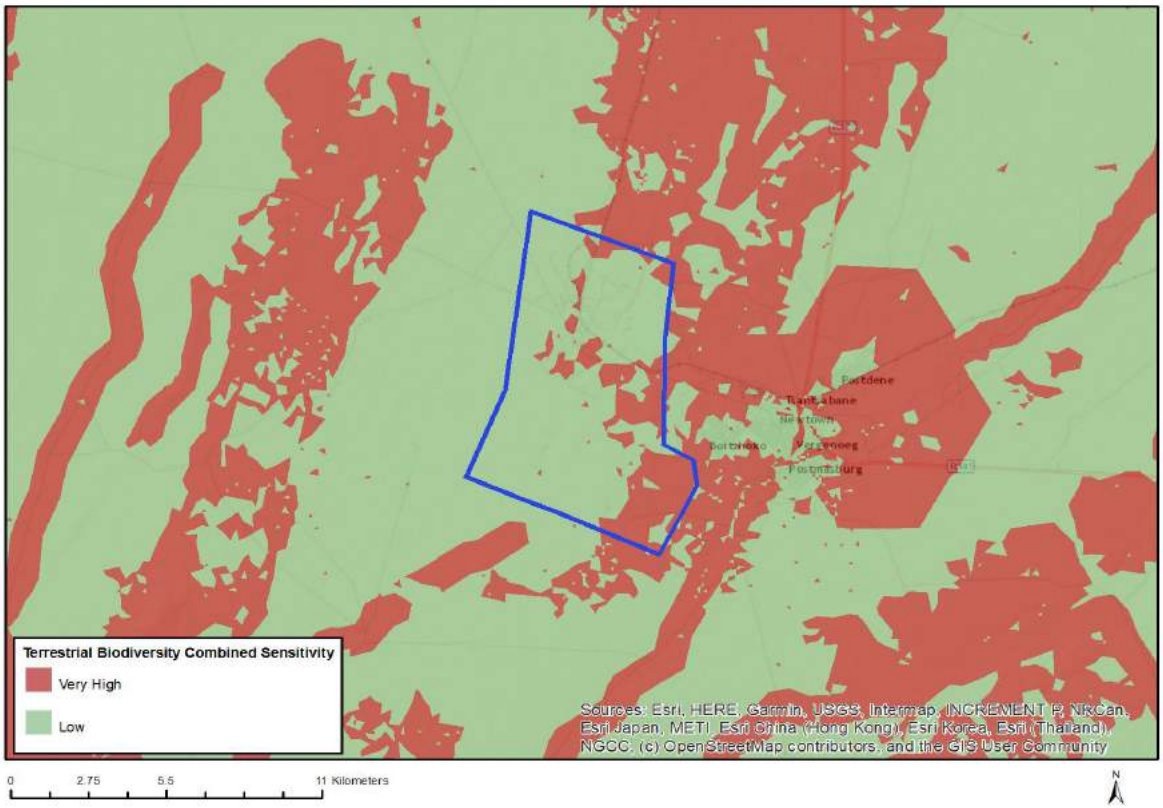


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Low	None
Very High	Ecological Support Area 1

19/11/2019

Appendix 6: Proof of Payment

Tanja Bekker

From: Raisibe Sekepane <Raisibe.Sekepane@dmr.gov.za>
Sent: 21 December 2015 09:45 AM
To: Tanja Bekker
Cc: Tony Olyn
Subject: RE: Payment of Basic Assessment Fee

Good morning

Please find the banking details for your attention. In future please do not send emails to Mr. Olyn as he is not MEM official. The following officials will be able to assist you where possible,

1. Lesiba Kekana
2. Kgaudi shapo
3. Machalla Ramaboea
4. Eugen Nkatlholang
5. Patricia makhuvhele
6. Patricia Shandukani
7. Vinccent Muila
8. Selo Oliphant
9. Livhuwani Malatjie
10. Humbulani Mashau
11. Ndidzu Mavhungu
12. Johannes Nematatani
13. Takalani Khorombi
14. Linda mjemla
15. Deidre kersten
16. Raisibe sekepane

Account Holder : **Department of Mineral Resources (Kimberley)**
Name of the Bank : **Absa**
Acc Number : **40-5916-0637**
Bank Code : **632005**
Ref No (13 Digits) : **NCNEMA0223MR-put relevant reference pls.**

Fax to email: No. **:0865867035**

From: Tanja Bekker [mailto:tanja@envirogistics.co.za]
Sent: 21 December 2015 08:49 AM
To: Tony Olyn
Cc: Raisibe Sekepane
Subject: RE: Payment of Basic Assessment Fee
Importance: High

Dear Tony

I am struggling getting advice from the department regarding the submission of the Basic Assessment Application for Beeshoek Iron Ore Mine. SAMRAD, both Kimberley and Pretoria, informed me that the application cannot be submitted via SAMRAD, due to the fact that the age of the mine and that the Mining Right (Converted) does not allow for such a submission. I was advised to submit this application in hard copy and provide SAMRAD Kimberley with an electronic copy as they can upload the file internally.

My problem is that I would like to submit this application in hard copy now, but I need to make the R2000- application fee, and for that I require the banking details.

Is there any possibility that you can assist me in providing the banking details for the Basic Assessment Fee Payment. This is all I need in order to submit the application. I will then courier the application to Kimberley with the proof of payment and our process can commence.

I am looking forward to your response.

Regards
Tanja

Kind Regards,

Tanja Bekker
MSc. Environmental Management
Certified EAPSA; PrSci. Reg. 400198/09

EnviroGistics (Pty) Ltd
PO Box 22014, Helderkruin, 1733
Email: tanja@envirogistics.co.za
Cell: 082 412 1799
Fax: 086 551 5233

"Driven to achieve Environmental Compliance and Excellence throughout the life cycles of a project and enabling clients to focus on operating a successful business within a sustainable environment."

From: Tanja Bekker
Sent: 03 December 2015 07:17 AM
To: 'Tony Olyn' <Tony.Olyn@dmr.gov.za>
Cc: Raisibe Sekepane <Raisibe.Sekepane@dmr.gov.za>
Subject: RE: Payment of Basic Assessment Fee

Thank you Tony. I am looking forward to Raisibe's response. We would like to submit the application as soon as possible, but need this information to proceed.

Kind Regards
Tanja

From: Tony Olyn [mailto:Tony.Olyn@dmr.gov.za]
Sent: 03 December 2015 07:03 AM
To: Tanja Bekker <tanja@envirogistics.co.za>
Cc: Raisibe Sekepane <Raisibe.Sekepane@dmr.gov.za>
Subject: RE: Payment of Basic Assessment Fee

Good day
Raisibe please assist.
Regards

Tony Olyn
Dept: Mineral Resources
Records Administrator
Phone:053 807 1705
Fax:0866936426
mineral resources
Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

From: tanja@envirogistics.co.za [mailto:tanja@envirogistics.co.za]
Sent: 02 December 2015 04:29 PM
To: Tony Olyn
Subject: FW: Payment of Basic Assessment Fee
Importance: High

Dear Tony

I hope that you can assist me.

I have tried numerous times to get advice from the DMR Kimberley, as well as the SAMRAD Department in Pretoria on how I can submit a Basic Assessment Application to the Department. According the DMR Kimberly it must be done on the SAMRAD system, however this system does not provide for Basic Assessment Applications if these are not directly to apply for a Prospecting Right, Mining Right or Mining Permit. This was also confirmed during my discussions with SAMRAD Pretoria.

Our application is for a new storm water dam within an approved Mining Rights area.

I can submit the report in hard copy and also submit a CD to manually load unto the system as instructed by the official dealing with the SAMRAD system in the Kimberley office, however I first have to make the application fee payment. Is the following banking details still relevant:
Banking details:
Bank: ABSA
Branch: 632005
Account number: 40-5916-0637

For the reference number, do I use the mine's existing Mining Right Number?

Can you please assist me in this regard?

Kind Regards
Tanja Bekker

Tanja Bekker
MSc. Environmental Management
Certified EAPSA; PrSci. Reg. 400198/09

EnviroGistics
PO Box 22014, Helderkruin, 1733
Email: tanja@envirogistics.co.za
Cell: 082 412 1799
Fax: 086 551 5233

"Driven to achieve Environmental Compliance and Excellence throughout the life cycles of a project and enabling clients to focus on operating a successful business within a sustainable environment."

NOTIFICATION OF PAYMENT

To Whom It May Concern:

First National Bank hereby confirms that the following payment instruction has been received:

Date Actioned	: 2021/02/10
Time Actioned	: 10:31:58
Trace ID	: G6YHD25G

Payer Details

Payment From	: Envirogistics
Cur/Amount	: ZAR15,000.00

Payee Details

Recipient/Account No	: . . 160637
Name	: Dmre (kimberley)
Bank	: ABSA Bank
Branch Code	: 632005
Reference	: NCNEMA 223MR

END OF NOTIFICATION

To authenticate this Payment Notification, please visit the First National Bank website at fnb.co.za, select the "Verify Payment" link and follow the on-screen instructions.

Our customer (the payer) has requested First National Bank Limited to send this notification of payment to you. Should you have any queries regarding the contents of this notice, please contact the payer. First National Bank Limited does not guarantee or warrant the accuracy and integrity of the information and data transmitted electronically and we accept no liability whatsoever for any loss, expense, claim or damage, whether direct, indirect or consequential, arising from the transmission of the information and data.

Appendix 7: Other Applications

Not applicable at this time – a Water Use Licence Application will be submitted upon the EIA report availability