# STOCKPILLING ON A PORTION 240 OF THE FARM ZWARTKOP 356 JR, CITY OF TSWANE, GAUTENG PROVINCE

#### FINAL BASIC ASSESSMENT REPORT



**OCTOBER 2022** 

REFERENCE NUMBER: GAUT 002/22-23/E3172

#### PREPARED FOR:

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#### **PREPARED BY:**

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Basic Assessment Report in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, and the Environmental Impact Assessment Regulations, 2014 (Version 2)

#### Kindly note that:

- 1. This Basic Assessment Report is the standard report required by GDARD in terms of the EIA Regulations, 2014.
- 2. This application form is current as of 8 December 2014. It is the responsibility of the EAP to ascertain whether subsequent versions of the form have been published or produced by the competent authority.
- A draft Basic Assessment Report must be submitted, for purposes of comments within a period of thirty (30)
  days, to all State Departments administering a law relating to a matter likely to be affected by the activity to be
  undertaken.
- 4. A draft Basic Assessment Report must be submitted, for purposes of comments within a period of thirty (30) days, to a Competent Authority (uploaded to the EIA online system) empowered in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended to consider and decide on the application.
- 5. A copy (PDF) of the final report and attachments must be uploaded to the EIA online system in at offices of the relevant competent authority, as detailed below.
- 6. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
- 7. Selected boxes must be indicated by a cross and, when the form is completed electronically, must also be highlighted.
- 8. An incomplete report may lead to an application for environmental authorisation being refused.
- 9. Any report that does not contain a titled and dated full colour large scale layout plan of the proposed activities including a coherent legend, overlain with the sensitivities found on site may lead to an application for environmental authorisation being refused.
- 10. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the application for environmental authorisation being refused.
- 11. The applicant must fill in all relevant sections of this form. Incomplete applications will not be processed. The applicant will be notified of the missing information in the acknowledgement letter that will be sent within 10 days of receipt of the application.
- 12. No faxed or e-mailed reports will be accepted. Only hand delivered or posted applications will be accepted.
- 13. Unless protected by law, and clearly indicated as such, all information filled in on this application will become public information on receipt by the competent authority. The applicant/EAP must provide any interested and affected party with the information contained in this application on request, during any stage of the application process.
- 14. Although pre-application meeting with the Competent Authority is optional, applicants are advised to have these meetings prior to submission of application to seek guidance from the Competent Authority.

#### **DEPARTMENTAL DETAILS**

Gauteng Department of Agriculture and Rural Development Attention: Administrative Unit of the of the Environmental Affairs Branch P.O. Box 8769 Johannesburg 2000

Administrative Unit of the Sustainable Utilisation of the Environment (SUE) Branch Ground floor, Umnotho House, 56 Eloff Street, Johannesburg Email Address: bongani.shabangu@gauteng.gov.za

Administrative Unit telephone number: (011) 240 3052/3052 Department central telephone number: (011) 240 2500

	(For official use only	<i>(</i> )					
NEAS Reference Number:							
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Application Number:						·	
Date Received:				<u> </u>	1		
K. H. B. B. L							
If this BAR has not been subr							
permission was not requested t frame.	.o Submit Within 140	days, pieas	se maicale in	e reasons ior	not submitti	ng within	ı ume
Is a closure plan applicable for	this application and	has it been	included in th	nis report?			YES
то столожения решения организация							ILO
if not, state reasons for not inclu	uding the closure pla	an.					
Has a draft report for this appli	iaatian haan auhmit	tad ta a sar	mnotont outh	ority and all S	toto Doporti	monto	
administering a law relating to a					state Departi	Hems	YES
administering a law relating to a	i matter likely to be	anecieu as	a result of thi	3 activity:			
Is a list of the State Departmen	ts referred to above	attached to	this report in	cludina their f	ull contact d	etails	YES
and contact person?							IES
·							
If no, state reasons for not attac	ching the list.						
Harris Otata Damantos anta includ							
Have State Departments includ	ing the competent a	autnority cor	nmentea?				YES
If no, why?							
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	_						
						_	

### **SECTION A: ACTIVITY INFORMATION**

#### 1. PROPOSAL OR DEVELOPMENT DESCRIPTION

Project title (must be the same name as per application form):						
Stockpilling on A Portion 240 of The Farm Zwartkop 356 JR, City Of Tswane, Gauteng Province						
Select the appropriate box  The application is for an upgrade of an existing development of an existin						
If yes, have you applied for the authorisation(s)?  If yes, have you received approval(s)? (attach in appropriate appendix)  N/A  N/A						
2. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES						

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations:

Title of legislation, policy or guideline:

Administering authority:

Promulgation
Date:

		Dato.
National Environmental Management Act, 1998 (Act No. 107 of	National & Provincial	29 January 1999
1998 as amended).		
National Environment Management: Air Quality Act 39 of 2004	Provincial	24 February 2005
National Environmental Management: Biodiversity Act, 2004	Provincial	7 June 2004
National Environmental Management: Waste Act 59 of 2008	Provincial	10 March 2009

Description of compliance with the relevant legislation, policy or guideline:

Legislation, policy of guideline	Description of compliance
GNR 327 Listing Notice 1 of 2017 Activity 26	Residential, retail, recreational, tourism, commercial or institutional developments of 1 000 square metres or more, on land previously used for mining or heavy industrial purposes –
	excluding —
	(i) where such land has been remediated in terms of part 8 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies; or
	(ii) where an environmental authorisation has been obtained for the decommissioning of such a mine or industry in terms of this Notice or any previous NEMA notice; or
	(iii) where a closure certificate has been issued in terms of section 43 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) for such land.

GNR 327 Listing Notice 1 of 2021 Activity 31

The closure of existing facilities, structures, or infrastructure for-

- (i) Any development and related operation activity or activities listed in this Notice;
- (ii) Any expansion and related operation activities or activities listed in this Notice;
- (iii) ...
- (iv) Any phased activity or activities for development and related operation activity or expansion or related operation activities listed in this Notice; or
- (v) Any activity regardless the time the activity was commenced with, where such activity:
- (a) Is similarly listed to an activity in (i) or (ii) above; and
- (b) Is still in operation or development is in progress

Excluding where-

(aa) ...

(bb) the closure is covered by part 8 of the National Environmental Management: Waste Act, 2008 as decommissioning, in which case the National Environmental Management: Waste Act, 2008 applies; or

(cc) such closure forms part of a mining application in which case the requirements of the Financial Provisioning Regulations apply.

#### 3. ALTERNATIVES

Describe the proposal and alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished. The determination of whether the site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment.

The no-go option must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. **Do not** include the no go option into the alternative table below.

**Note:** After receipt of this report the competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

Please describe the process followed to reach (decide on) the list of alternatives below

The proposed area is over an undisturbed area used for stockpiling next to an existing mining area. The position of the proposed site is ideal due to it being already disturbed without the need to open any natural vegetation therefore this was

deem	ed the only viable site alternative.		
A	towastine Cite (CO) was account for the	was and standardian but found and an	
	` '		nvironmentally and practically suitable as inificance without the need or motivation
	ring it.	i tilis site alternative is of higher sign	illicance without the need of motivation
jaotiij	9		
Provi	de a description of the alternatives consid	dered	
No.	Alternative type, either alternative: site on property, properties, activity, design, technology, energy, operational or other( provide details of	Description	
	"other") N/A - please see above		
In the	event that no alternative(s) has/have be	en provided, a motivation must be incl	uded in the table below.
As m	entioned earlier, since the proposed are	a has already been previously used a	as a stockpile area, the applicant
will n	ot explore any other alternatives or distur	b any other area.	
4.	PHYSICAL SIZE OF THE ACTIV	/ITY	
			otprints are to include all new infrastructure
(road	s, services etc), impermeable surfaces a	nd landscaped areas:	Size of the activity:
	osed activity (Total environmental (land	lscaping, parking, etc.)	15.7 ha
	the building footprint) natives: Refer to Section 3 above, no fea	asible alternatives exist.	
	native 1 (if any)		
Alteri	native 2 (if any)		Ha/ m²
4-	a line and a saintistance		
01, 10	r linear activities:		Length of the activity:
	osed activity natives:		
	natives. native 1 (if any)		
Alter	native 2 (if any)		
			m/km
Indica	ate the size of the site(s) or servitudes (w	ithin which the above footprints will occ	,
Prop	osed activity		Size of the site/servitude: 15.7 ha
	natives:		
	native 1 (if any) native 2 (if any)		
			Ha/m²
5.	SITE ACCESS		
Prop		an directly from an existing road?	VEC
	ready access to the site exist, or is acces, what is the distance over which a new a		YES m

Describe the type of access road planned:

The applicant will make use of the existing access road currently on site and no new roads will be needed for this activity. Adequate drainage and erosion protection in the form of cut-off berms or trenches will be provided where

Include the position of the access road on the site plan (if the access road is to traverse a sensitive feature the impact thereof must be included in the assessment).



Figure 1: Satellite view showing the current access road (yellow line) to the proposed area site.

## PLEASE NOTE: Points 6 to 8 of Section A must be duplicated where relevant for alternatives

Section A 6-8 has been duplicated (only complete when applicable)

#### 6. LAYOUT OR ROUTE PLAN

A detailed site or route (for linear activities) plan(s) must be prepared for each alternative site or alternative activity. It must be attached to this document. The site or route plans must indicate the following:

- > the layout plan is printed in colour and is overlaid with a sensitivity map (if applicable);
- layout plan is of acceptable paper size and scale, e.g.
  - o A4 size for activities with development footprint of 10sqm to 5 hectares;
  - A3 size for activities with development footprint of > 5 hectares to 20 hectares;
  - A2 size for activities with development footprint of >20 hectares to 50 hectares);
  - A1 size for activities with development footprint of >50 hectares);
- ➤ The following should serve as a guide for scale issues on the layout plan:
  - o A0 = 1: 500
  - o A1 = 1: 1000
  - o A2 = 1: 2000
  - o A3 = 1: 4000
  - o A4 = 1: 8000 (±10 000)
- > shapefiles of the activity must be included in the electronic submission on the CD's;
- > the property boundaries and Surveyor General numbers of all the properties within 50m of the site;
- the exact position of each element of the activity as well as any other structures on the site;
- the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, sewage pipelines, septic tanks, storm water infrastructure;
- servitudes indicating the purpose of the servitude;
- sensitive environmental elements on and within 100m of the site or sites (including the relevant buffers as prescribed by the competent authority) including (but not limited thereto):
  - Rivers and wetlands;
  - o the 1:100 and 1:50 year flood line;
  - o ridges;
  - o cultural and historical features;
  - areas with indigenous vegetation (even if it is degraded or infested with alien species);
- Where a watercourse is located on the site at least one cross section of the water course must be included (to allow the position of the relevant buffer from the bank to be clearly indicated)

#### FOR LOCALITY MAP (NOTE THIS IS ALSO INCLUDED IN THE APPLICATION FORM REQUIREMENTS)

- > the scale of locality map must be at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map;
- > the locality map and all other maps must be in colour;
- locality map must show property boundaries and numbers within 100m of the site, and for poultry and/or piggery, locality map must show properties within 500m and prevailing or predominant wind direction:
- for gentle slopes the 1m contour intervals must be indicated on the map and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the map;
- > areas with indigenous vegetation (even if it is degraded or infested with alien species);
- locality map must show exact position of development site or sites;
- locality map showing and identifying (if possible) public and access roads; and
- > the current land use as well as the land use zoning of each of the properties adjoining the site or sites.

#### 7. SITE PHOTOGRAPHS

Colour photographs from the center of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under the appropriate Appendix. It should be supplemented with additional photographs of relevant features on the site, where applicable.

#### 8. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of 1:200 for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity to be attached in the appropriate Appendix.

# SECTION B: DESCRIPTION OF RECEIVING ENVIRONMENT

**Note**: Complete Section B for the proposal and alternative(s) (if necessary)

#### Instructions for completion of Section B for linear activities

- For linear activities (pipelines etc) it may be necessary to complete Section B for each section of the site that has a significantly different environment.
- 2) Indicate on a plan(s) the different environments identified
- 3) Complete Section B for each of the above areas identified
- 4) Attach to this form in a chronological order
- 5) Each copy of Section B must clearly indicate the corresponding sections of the route at the top of the next page.

Section I	3 has been duplicated for sections of the route	0	times
Instruc	ctions for completion of Section B for	location/route alternative	es
	For each location/route alternative identified the		
2)	Each alterative location/route needs to be clearly	indicated at the top of the next page	age

Section B has been duplicated for location/route alternatives 

times (complete only when appropriate)

## Instructions for completion of Section B when both location/route alternatives and linear activities are applicable for the application

Section B is to be completed and attachments order in the following way

Attach the above documents in a chronological order

- □ All significantly different environments identified for Alternative 1 is to be completed and attached in a chronological order; then
- □ All significantly different environments identified for Alternative 2 is to be completed and attached chronological order,

Section B - Section of Route	(complete only when appropriate for above)
Section B – Location/route Alternative No.	(complete only when appropriate for above)

# 1. PROPERTY DESCRIPTION Property description: (Including Physical

Address and Farm

name, portion etc.)

stockpiled material as well as stockpile and sell material in future as a commercial product on portion 240 of the Farm Zwartkop 356 JR, City of Tswane, Gauteng Province to various clients in the Road and Infrastructure industries.

The applicant, Lomeza Mining Services (Pty) Ltd, intends to sell the existing

The above-mentioned area is a site previously used for mining purposes and the area contains existing dolomite stockpiles in which the applicant intents to sell the material as a commercial product. The proposed footprint will be 15.7 ha. The applicant applied for an EA according to National Environmental Management Act, 1998 (Act No 107 Of 1998 NEMA) as well as the Environmental Impact Assessment Regulations of 2014 (as amended) for a stockpile area exceeding 1000 square metres to sell the existing material as a commercial product as well as future use for a temporary storage area for commercial sales.

The area is located approximately 1.8 km from the residential area Laudium and 2.8 km from Erasmia. The Zwartkops Raceway borders the site to the

west, with the S.W.A.T National Firearms Centre bordering the property of the proposed area to the north. The Department of Defense SA Special Forces Joint Operations Division utilize the bordering property for military purposes, with the Department of Transport's offices and housing infrastructure bordering the proposed property to the south and a conservation area bordering the proposed area to the south-east direction.

The property (Portion 240 of the farm Zwartkop 356JR) was previously used for mining purposes with the existing quarry on site used for the winning of mineral resources in the 1960's.

The M22 (Quagga Road) and M24 (Alaric road) pass the property respectively to the west and south east.

#### 2. ACTIVITY POSITION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in decimal degrees. The degrees should have at least six decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

Proposed site:

	Latitude (S):	Longitude (E):
	Latitude (S)	Longitude (E)
Α	25°48'25,333"S	28°6'56,102"E
В	25°48'25,837"S	28°6'58,313"E
С	25°48'29,401"S	28°7'4,508"E
D	25°48'28,019"S	28°7'6,362"E
E	25°48'34,373"S	28°7'11,273"E
F	25°48'39,132"S	28°7'5,7"E
G	25°48'40,108"S	28°6'53,878"E
Н	25°48'32,353"S	28°6'50,324"E
I	25°48'31,446"S	28°6'54,097"E
J	25°48'30,838"S	28°6'54,198"E
K	25°48'29,225"S	28°6'57,69"E
L	25°48'25,333"S	28°6'56,102"E



Figure 2: Satellite image of the proposed stockpile area (yellow polygon)

The 21-digit Surveyor General code of each cadastral land parcel

PROPOSAL	Т	0	J	R	0	0	0	0	0	0	0	0	0	3	5	6	0	0	2	4	0	

#### 3. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Flat	1:50 - 1:20	1:20 - 1:15	1:15 – 1:10	1:10 – 1:7.5	1:7.5 – 1:5	Steeper than 1:5

#### 4. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site.

Ridgeline	Plateau	Side slope of hill/ridge	Valley	Plain	Undulating plain/low hills	River front
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#### 5. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

a) Is the site located on any of the following?

Shallow water table (less than 1.5m deep)

Dolomite, sinkhole or doline areas

Seasonally wet soils (often close to water bodies)

Unstable rocky slopes or steep slopes with loose soil

Dispersive soils (soils that dissolve in water)

Soils with high clay content (clay fraction more than 40%)

Any other unstable soil or geological feature

An area sensitive to erosion

	NO
YES	
	NO

(Information in respect of the above will often be available at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

b) are any caves located on the site(s)

NO

If yes to above provide location details in terms of latitude and longitude and indicate location on site or route map(s)

Latitude (S):		gitude (E):		
c) are any caves located If yes to above provide lo Latitude (S):	cation details in terms	f the site(s) of latitude and longitude an gitude (E):	d indicate location on s	NO site or route map(s)
d) are any sinkholes loca If yes to above provide lo Latitude (S):	cation details in terms	is of the site(s) of latitude and longitude and litude (E):	[ ad indicate location on s	NO site or route map(s)
If any of the answers to the AGRICULTUI		"unsure", specialist input m	nay be requested by the	e Department
Potential Atlas (GAPA 4)	?	contemplated in the Gauter		NO
<ul><li>Please note: The Depart</li><li>7. GROUNDCO</li></ul>		cialist input/studies in respe	ect of the above.	
To be noted that the loca the site plan(s).	tion of all identified rare	or endangered species or	other elements should	be accurately indicated on
Indicate the types of grou	indcover present on the	e site and include the estim	ated percentage found	on site
Natural veld - good condition % = 20	Natural veld with scattered aliens % = 12	Natural veld with heavy alien infestation % =	Veld dominated by alien species % =	Landscaped (vegetation) % =
Sport field % =	Cultivated land % =	Paved surface (hard landscaping) % =	Building or other structure % =	Bare soil % =88
Please note: The Depart impact(s) of the proposed		cialist input/studies depend	ling on the nature of the	e groundcover and potential
Are there any rare or end on the site	angered flora or fauna	species (including red list s	species) present	NO
If YES, specify and expla	in:			
within a 200m (if within unthe urban area as defined	rban area as defined in d in the Regulations) ra	species (including red list s the Regulations) or within dius of the site.		NO
If YES, specify and expla	in:			
Are there any special or s If YES, specify and expla		er natural features present	t on the site?	NO

According to SANBI's Gauteng C-Plan 3.3 (Terrestrial CBA) map a section of the proposed area falls within an ecological support area. However, this area has been previously disturbed, and no sensitive landscapes remain within the application as it was previously used for mining purposes. A small section 1.9 ha (12% of the application area) has not yet been disturbed and should be regarded as a no-go area.

According to the Biodiversity Assessment conducted by MORA Ecological Services (Pty) Ltd (Appendix G1), the study site has been severely disturbed due to previous mining activities. Very few patches of natural vegetation remain within the property boundaries. The site shows low sensitivity, and no species of conservation concern were observed. However, disturbance should be limited strictly to the specified activities associated with the stockpiling. The client should appoint an ecologist to compile an Alien Management Plan and it should be implemented during operation of the site.

Was a specialist consulted t	to assist	with completing this sect	ion			YES	
If yes complete specialist de	etails						
Terrestrial Biodiversity Asse	essment						
Name of the specialist:		Mr Mokgatla Molepo,					
Qualification(s) of the specia	alist:	Mr Molepo has a Mate	rs in Zoology	·.			
Postal address:		350 Johan St, Arcadia					
Postal code:		0002					
Telephone:	076 559			Cell:	081 4	10 3763	
E-mail:	mokgat	lajm@gmail.com		Fax:			
Are any further specialist st	udies rec	commended by the specia	alist?				NO
If YES,							
specify:						1	NO
If YES, is such a report(s) a							NO
If YES list the specialist repo	orts attac	ned below					
Signature of specialist:			Date:				
olghatare of specialist.			Date.				
Please note; If more than o	ne speci	alist was consulted to as	sist with the f	filling in of this	section	n then this tal	ole must be
appropriately duplicated				Ü			
Was a specialist consulted t		with completing this sect	ion			YES	
If yes complete specialist de	etails						
Stormwater Management P	lan						
Name of the specialist:		R Sukhlal					
Qualification(s) of the specia	aliet·	T Outiliai					
Postal address:	uliot.	652 Wildpear Crescent	t Thornvalley	/ Estate			
r ostar address.		Greenstone Hill,	i, momvanoj	, Lotato,			
Postal code:		1610					
Telephone:				Cell:	082.8	E4 00 4	
E-mail:				Cell.		51 984	
Are any further specialist sti	ajeshs@	@etlconsulting.co.za		Fax:	002 0	51 984	
			alist?		002 0	51 984	NO
If YES,		etlconsulting.co.za ommended by the special	alist?		002 0	51 984	NO
If YES, specify:	udies rec	ommended by the specia	alist?		002.0	51 984	NO
If YES, specify: If YES, is such a report(s) a	udies rec	ommended by the specia	alist?		002.0	51 984	NO NO
If YES, specify:	udies rec	ommended by the specia	alist?		002.0	51 984	
If YES, specify: If YES, is such a report(s) a	udies rec	ommended by the specia	alist?		002.0	51 984	
If YES, specify: If YES, is such a report(s) a	udies rec	ommended by the specia	alist?		002 0	51 984	

Please note; If more than one specialist was consulted to assist with the filling in of this section then this table must be

#### 8. LAND USE CHARACTER OF SURROUNDING AREA

appropriately duplicated

Using the associated number of the relevant current land use or prominent feature from the table below, fill in the position of these land-uses in the vacant blocks below which represent a 500m radius around the site

1. Vacant land	River, stream, wetland	Nature conservation area	4. Public open space 5. Koppie or		
6. Dam or reservoir	7. Agriculture	Low density     residential	Medium to high density residential	10. Informal residential	
11. Old age home	12. Retail	13. Offices	14. Commercial & warehousing	15. Light industrial	
16. Heavy industrial <sup>AN</sup>	17. Hospitality facility	18. Church	19. Education facilities	20. Sport facilities	
21. Golf course/polo fields	22. Airport <sup>N</sup>	23. Train station or shunting yard <sup>N</sup>	24. Railway line <sup>N</sup>	25. Major road (4 lanes or more) <sup>N</sup>	
26. Sewage treatment plant <sup>A</sup>	27. Landfill or waste treatment site <sup>A</sup>	28. Historical building	29. Graveyard	30. Archeological site	
31. Open cast mine	32. Underground mine	33.Spoil heap or slimes dam <sup>A</sup>	34. Small Holdings		
	The Zwartkops Race	way borders the site to the	e west, with the S.W.A.	Γ National Firearms	
	Centre bordering the property of the proposed area to the north. An existing open cast pit				
Other land uses	mined by Exxaro borders the site to the east. The Department of Defence SA Special				
(describe):	Forces Joint Operations Division utilize the bordering property for military purposes, with the				
	Department of Trans	sport's offices and housi	ing infrastructure borde	ering the proposed	
	stockpiling area to the	e south.	stockpiling area to the south.		

NOTE: Each block represents an area of 250m X 250m, if your proposed development is larger than this please use the appropriate number and orientation of hashed blocks

		N	ORTH			
	1	25	1	1	8	
	8	25	OTHER	31	8	
WEST	OTHER	25		1	8	EAST
	OTHER	25		1	1	
	1	25	OTHER	3	1	

SOUTH

Note: More than one (1) Land-use may be indicated in a block

**Please note**: The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the proposed activity/ies. Specialist reports that look at health & air quality and noise impacts may be required for any feature above and in particular those features marked with an "A" respectively.

Have specialist reports been attached	NO
If yes indicate the type of reports below	

#### 9. SOCIO-ECONOMIC CONTEXT

Describe the existing social and economic characteristics of the area and the community condition as baseline information to assess the potential social, economic and community impacts.

SOCIO-ECONOMIC ENVIRONMENT		

(Information extracted from the City of Tshwane Integrated Development Plan - 2021-2026)

The proposed area is located within region 4 of City of Tshwane Metropolitan Municipality that is situated in the south-western portion of the metropolitan area. The region borders on the area of jurisdiction of the City of Johannesburg, the City of Ekurhuleni as well as Mogale City to the west. Region 4 is 489 km² in extent and has 11 wards.

City of Tshwane Metropolitan Municipality which is the fourth biggest municipality in South Africa and second biggest in Gauteng in terms of gross value added by region with gross value add of R497 billion. In 2019, City of Tshwane contributed 28.4 percent to the provincial economy. Moreover, Tshwane accounted for 9.79 percent of the country's economy.

#### Population structure

City of Tshwane Metropolitan Municipality's male/female split in population was 98.0 males per 100 females in 2019. In 2019, the City of Tshwane Metropolitan Municipality's population consisted of 78.95% African (2.81 million), 16.89% White (601 000), 2.02% Coloured (71 900) and 2.14% Asian (76 000) people.

The largest share of population is within the young working age (25-44 years) age category with a total number of 1.23 million or 34.7% of the total population. The age category with the second largest number of people is the babies and kids (0-14 years) age category with a total share of 24.9%, followed by the older working age (45-64 years) age category with 615 000 people. The age category with the least number of people is the retired / old age (65 years and older) age category with only 243 000 people, as reflected in the population pyramids below.

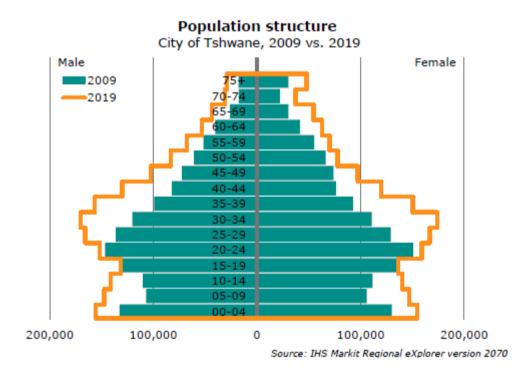


Figure 3: Population structure of City of Tshwane, 2009 vs 2019 (image extracted from the City of Tshwane Integrated Development Plan - 2021-2026)

#### **Education**

The number of people without any schooling decreased from 2009 to 2019 with an average annual rate of -1.95%, while the number of people within the 'matric only' category, increased from 586,000 to 876,000. The number of people with 'matric and a

certificate/diploma' increased with an average annual rate of 3.29%, with the number of people with a 'matric and a Bachelor's' degree increasing with an average annual rate of 5.47%. Overall improvement in the level of education is visible with an increase in the number of people with 'matric' or higher education.

Table 1: Highest level of education: Age 15+ (image extracted from the City of Tshwane Integrated Development Plan - 2021-2026

	City of Tshwane	Gauteng	National Total	City of Tshwane as % of province	City of Tshwane as % of national
No schooling	63,700	229,000	2,060,000	27.9%	3.1%
Grade 0-2	19,500	89,500	638,000	21.8%	3.1%
Grade 3-6	104,000	479,000	3,030,000	21.6%	3.4%
Grade 7-9	249,000	1,200,000	6,130,000	20.8%	4.1%
Grade 10-11	486,000	2,310,000	9,130,000	21.1%	5.3%
Certificate / diploma without matric	13,700	53,100	183,000	25.8%	7.5%
Matric only	876,000	3,580,000	11,400,000	24.5%	7.7%
Matric certificate / diploma	236,000	785,000	2,380,000	30.1%	9.9%
Matric Bachelors degree	232,000	703,000	1,760,000	33.0%	13.2%
Matric Postgrad degree	120,000	349,000	787,000	34.5%	15.3%

#### **Economy**

City of Tshwane Metropolitan Municipality employs a total number of 1.21 million people within its metropolitan municipality. The metropolitan municipality that employs the highest number of people relative to the other regions within Gauteng Province is City of Johannesburg metropolitan municipality with a total number of 2.13 million. The metropolitan municipality that employs the lowest number of people relative to the other regions within Gauteng Province is Sedibeng metropolitan municipality with a total number of 244 000 employed people.

In City of Tshwane Metropolitan Municipality the economic sectors that recorded the largest number of employment in 2019 were the community services sector with a total of 284 000 employed people or 23.5% of total employment in the metropolitan municipality. The finance sector with a total of 284 000 (23.4%) employs the second highest number of people relative to the rest of the sectors. The electricity sector with 2 420 (0.2%) is the sector that employs the least number of people in City of Tshwane Metropolitan Municipality, followed by the agriculture sector with 10 400 (0.9%) people employed.

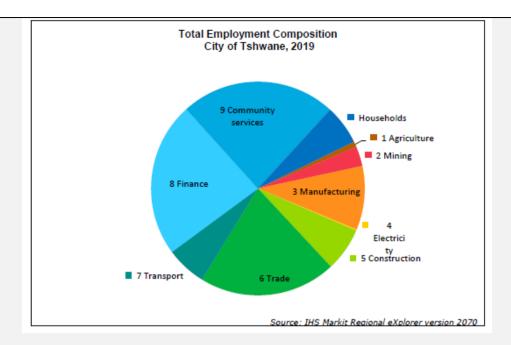


Figure 4: Total Employment Per Broad Economic Sector (image extracted from the City of Tshwane Integrated Development Plan - 2021-2026

Additional workers to be appointed on this site will be sourced from the local community. Workers will daily be transported to the site. The stockpiled material could be used to generate income as well as provide material to the construction and business industries thereby generating income and directly contributing to the economy of the area

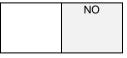
#### 10. CULTURAL/HISTORICAL FEATURES

Please be advised that if section 38 of the National Heritage Resources Act 25 of 1999 is applicable to your proposal or alternatives, then you are requested to furnish this Department with written comment from the South African Heritage Resource Agency (SAHRA) – Attach comment in appropriate annexure

- 38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as-
- (a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
- (b) the construction of a bridge or similar structure exceeding 50m in length;
- (c) any development or other activity which will change the character of a site-
  - (i) exceeding 5 000 m2 in extent; or
  - (ii) involving three or more existing erven or subdivisions thereof; or
  - (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or
  - (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority:
- (d) the re-zoning of a site exceeding 10 000 m2 in extent; or
- (e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

Are there any signs of culturally (aesthetic, social, spiritual, environmental) or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including archaeological or palaeontological sites, on or close (within 20m) to the site?

If YES, explain:



If uncertain, the Department may request that specialist input be provided to establish whether there is such a feature(s) present on or close to the site.

Briefly explain the findings of the specialist if one was already appointed:

Will any building or structure older than 60 years be affected in any way? Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)? If yes, please attached the comments from SAHRA in the appropriate Appendix

NO
NO

### SECTION C: PUBLIC PARTICIPATION (SECTION 41)

**1.** The Environmental Assessment Practitioner must conduct public participation process in accordance with the requirement of the EIA Regulations, 2014.

#### 2. LOCAL AUTHORITY PARTICIPATION

Local authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the environmental sections of the local authority must be informed of the application at least thirty (30) calendar days before the submission of the application to the competent authority.

Was the draft report submitted to the local authority for comment?	YES	
If yes, has any comments been received from the local authority?	YES	
in you, had any commonic book received from the local datherty.	120	
If "YES", briefly describe the comment below (also attach any correspondence to and from the application):	e local a	uthority to this
Please see Appendix D4 - Communications to and from interested and affected parties		
If "NO" briefly explain why no comments have been received or why the report was not submitted if t	that is the	e case.

#### 3. CONSULTATION WITH OTHER STAKEHOLDERS

Any stakeholder that has a direct interest in the activity, site or property, such as servitude holders and service providers, should be informed of the application at least **thirty (30) calendar days** before the submission of the application and be provided with the opportunity to comment.

Has any comment been received from stakeholders?

YES	NO
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If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

Comments were received from the following stakeholders - please see appendix D for proof of correspondence:

- City of Tshwane: Environmental Planning & Open Space Management Section
- Department of Agriculture and Rural Development
- South African National Heritage Resources
- National Department of Public Works & Infrastructure
- Months of the regional Land Claims Commission

If "NO" briefly explain why no comments have been received					

#### 4. GENERAL PUBLIC PARTICIPATION REQUIREMENTS

The Environmental Assessment Practitioner must ensure that the public participation process is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees and ratepayers associations. Please note that public concerns that emerge at a later stage that should have been addressed may cause the competent authority to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was flawed.

The EAP must record all comments and respond to each comment of the public / interested and affected party before the application report is submitted. The comments and responses must be captured in a Comments and Responses Report as prescribed in the regulations and be attached to this application.

#### 5. APPENDICES FOR PUBLIC PARTICIPATION

All public participation information is to be attached in the appropriate Appendix. The information in this Appendix is to be ordered as detailed below

- Appendix 1 Proof of site notice (attached as Appendix D1)
- Appendix 2 Written notices issued as required in terms of the regulations (attached as Appendix D2)
- Appendix 3 Proof of newspaper advertisements (attached as Appendix D3)
- Appendix 4 Communications to and from interested and affected parties (attached as Appendix D4)
- Appendix 5 Minutes of any public and/or stakeholder meetings N/A no PPP meeting was requested.
- Appendix 6 Comments and Responses Report (attached as Appendix D5)
- Appendix 7 Comments from I&APs on Basic Assessment (BA) Report not yet applicable
- Appendix 8 Comments from I&APs on amendments to the BA Report N/A
- Appendix 9 Copy of the register of I&APs (attached as Appendix D6)

# SECTION D: RESOURCE USE AND PROCESS DETAILS

**Note:** Section D is to be completed for the proposal and alternative(s) (if necessary)

#### Instructions for completion of Section D for alternatives

- 1) For each alternative under investigation, where such alternatives will have different resource and process details (e.g. technology alternative), the entire Section D needs to be completed
- Each alterative needs to be clearly indicated in the box below
- 5) Attach the above documents in a chronological order

Section D has been duplicated	d for alternatives	"insert No. o	of duplicates"	times	(complete only when
appropriate)					·
Section D Alternative No.	"insert alternative n	umber" (complete	only when approp	riate for above)	

#### 1. WASTE, EFFLUENT, AND EMISSION MANAGEMENT

#### Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase? If yes, what estimated quantity will be produced per month? How will the construction solid waste be disposed of (describe)?

YES	
	$m^3$

The proposed project will continue activities on the existing stockpile area, making use of the existing site offices (storage containers), access roads and weighbridge. Therefore, no construction phase will be implemented. Due to the nature of the project, the small scale of the proposed operation, and the fact that no permanent infrastructure will be established, very little to no general waste will be generated. Should any emergency vehicle repairs be done all spills must be disposed of in a 200 litre closed container/bin found inside the emergency service area

#### Where will the construction solid waste be disposed of (describe)?

Since no construction phase will be implemented, no construction solid waste will be generated. However, any waste generated during the activity, will be contained in a sealable refuse bin that will be removed from site and incorporated in an approved waste disposal system of the contractor.

Will the activity produce solid waste during its operational phase? If yes, what estimated quantity will be produced per month?

YES	
	$0.5  \text{m}^3$

How will the solid waste be disposed of (describe)?

As mentioned earlier, the small scale of the project will generate very little waste. Non-biodegradable refuse such as glass bottles, plastic bags, metal scrap, etc., will be stored in a container at a collecting point and collected on a regular basis and disposed of at a recognized landfill site. Specific precautions shall be taken to prevent refuse from being dumped on or in the vicinity of the area. No waste will be disposed of, buried, burned or treated on the site.

treating/disposing o	y or relevant service provider confirmed that sufficient air space exists for f the solid waste to be generated by this activity? waste be disposed if it does not feed into a municipal waste stream (describ	no pe)?
The solid waste fee	d into the municipal waste stream.	
taken up in a munic	aste (construction or operational phases) will not be disposed of in a register ipal waste stream, the applicant should consult with the competent authority lange to an application for scoping and EIA.	
	solid waste be classified as hazardous in terms of the relevant legislation? mpetent authority and request a change to an application for scoping and E	IA.
	being applied for a solid waste handling or treatment facility? should consult with the competent authority to determine whether it is necessing and EIA.	NO ssary to change to an
Describe the measu	ures, if any, that will be taken to ensure the optimal reuse or recycling of mat	erials:
Will the activity proc sewage system? If yes, what estimate If yes, has the muni	her than domestic sewage) duce effluent, other than normal sewage, that will be disposed of in a municiped quantity will be produced per month? cipality confirmed that sufficient capacity exist for treating / disposing of the generated by this activity(ies)?	pal NO m³
	duce any effluent that will be treated and/or disposed of on site? ed quantity will be produced per month?	NO 0.5m <sup>3</sup>
Any effluents contain	nature of the effluent and how it will be disposed.	
	al spillages occur in a suitable receptacle and removed from the site, either	for resale or for
Note that if effluent	al at a recognized facility is to be treated or disposed on site the applicant should consult with the con it is necessary to change to an application for scoping and EIA	npetent authority to
If yes, provide the p	duce effluent that will be treated and/or disposed of at another facility?	V50
Eggility name:	articulars of the facility:	YES
Facility name:	articulars of the facility:  B-ONE HIRE	YES
Contact person: Postal address:	articulars of the facility:  B-ONE HIRE Sharon	YES
Contact person: Postal address: Postal code:	articulars of the facility:  B-ONE HIRE Sharon 9 Theron St, Lyttelton, Centurion, 0157	
Contact person: Postal address: Postal code: Telephone: E-mail:	articulars of the facility:  B-ONE HIRE Sharon  9 Theron St, Lyttelton, Centurion,  0157  0861 008 009 Cell: 071 sharon@b-one.co.za Fax:	609 2244
Contact person: Postal address: Postal code: Telephone: E-mail:	articulars of the facility:  B-ONE HIRE Sharon 9 Theron St, Lyttelton, Centurion, 0157 0861 008 009 Cell: 071	609 2244
Contact person: Postal address: Postal code: Telephone: E-mail:  Describe the measu N/A  Liquid effluent (do Will the activity prod If yes, what estimat If yes, has the muni	B-ONE HIRE Sharon  9 Theron St, Lyttelton, Centurion, 0157 0861 008 009 Sharon@b-one.co.za Cell: 071 Fax: ures that will be taken to ensure the optimal reuse or recycling of waste water	609 2244 er, if any:
Contact person: Postal address: Postal code: Telephone: E-mail:  Describe the measu  N/A  Liquid effluent (do  Will the activity prod  If yes, what estimate  If yes, has the muni  domestic effluent to  Will the activity prod  If yes describe how	B-ONE HIRE Sharon 9 Theron St, Lyttelton, Centurion, 0157 0861 008 009 sharon@b-one.co.za  Test:  Discrept that will be taken to ensure the optimal reuse or recycling of waste wate ed quantity will be produced per month? Cipality confirmed that sufficient capacity exist for treating / disposing of the be generated by this activity(ies)?  Cell: 071 Fax:  Discrept that will be taken to ensure the optimal reuse or recycling of waste wate ed quantity will be produced per month? Cipality confirmed that sufficient capacity exist for treating / disposing of the be generated by this activity(ies)?	609 2244 er, if any:  NO  NO  NO  NO
Contact person: Postal address: Postal code: Telephone: E-mail:  Describe the measu  N/A  Liquid effluent (do  Will the activity prod  If yes, what estimate  If yes, has the muni  domestic effluent to  Will the activity prod  If yes describe how	B-ONE HIRE Sharon  9 Theron St, Lyttelton, Centurion, 0157  0861 008 009 Sharon@b-one.co.za  Cell: 071 Fax: cress that will be taken to ensure the optimal reuse or recycling of waste water was a compact of the disposed of in a municipal sewage system and quantity will be produced per month?  cipality confirmed that sufficient capacity exist for treating / disposing of the disposed of on site?	609 2244 er, if any:  NO  NO  NO  NO
Contact person: Postal address: Postal code: Telephone: E-mail:  Describe the measu N/A  Liquid effluent (do Will the activity proof If yes, what estimate If yes, has the munity domestic effluent to  Will the activity proof If yes describe how Ablution facilities wif The chemical toilet	B-ONE HIRE Sharon 9 Theron St, Lyttelton, Centurion, 0157 0861 008 009 sharon@b-one.co.za  Press that will be taken to ensure the optimal reuse or recycling of waste wate end quantity will be produced per month? cipality confirmed that sufficient capacity exist for treating / disposing of the be generated by this activity(ies)?  Succe any effluent that will be treated and/or disposed of on site? it will be treated and disposed off. Il be provided in the form of a chemical toilet/s but will not be treated and/or will be anchored (to prevent blowing/falling over) and shall be serviced at lease the sharon.	609 2244  er, if any:  NO  NO  NO  r disposed of on site.
Contact person: Postal address: Postal code: Telephone: E-mail:  Describe the measu N/A  Liquid effluent (do Will the activity proof If yes, what estimate If yes, has the munity domestic effluent to  Will the activity proof If yes describe how Ablution facilities wif The chemical toilet	B-ONE HIRE Sharon  9 Theron St, Lyttelton, Centurion, 0157 0861 008 009 sharon@b-one.co.za  Tres that will be taken to ensure the optimal reuse or recycling of waste water and comparison of the disposed of in a municipal sewage system and quantity will be produced per month? cipality confirmed that sufficient capacity exist for treating / disposing of the disposed of the generated by this activity(ies)?  Succe any effluent that will be treated and/or disposed of on site? It will be treated and disposed off. Il be provided in the form of a chemical toilet/s but will not be treated and/or	609 2244  er, if any:  NO  NO  NO  r disposed of on site.
Contact person: Postal address: Postal code: Telephone: E-mail:  Describe the measu N/A  Liquid effluent (do Will the activity proof If yes, what estimate If yes, has the munity domestic effluent to  Will the activity proof If yes describe how Ablution facilities wi The chemical toilet the duration of the a	B-ONE HIRE Sharon 9 Theron St, Lyttelton, Centurion, 0157 0861 008 009 sharon@b-one.co.za  The state will be taken to ensure the optimal reuse or recycling of waste water and comments of the disposed of in a municipal sewage system and quantity will be produced per month? cipality confirmed that sufficient capacity exist for treating / disposing of the abe generated by this activity(ies)?  Succeeding the state of the	n? NO NO NO r disposed of on site.
Contact person: Postal address: Postal code: Telephone: E-mail:  Describe the measu N/A  Liquid effluent (do Will the activity proof If yes, what estimate If yes, has the munity domestic effluent to  Will the activity proof If yes describe how Ablution facilities with the duration of the activity releases to the content of the co	B-ONE HIRE Sharon 9 Theron St, Lyttelton, Centurion, 0157 0861 008 009 sharon@b-one.co.za  Trees that will be taken to ensure the optimal reuse or recycling of waste wate ed quantity will be produced per month? cipality confirmed that sufficient capacity exist for treating / disposing of the be generated by this activity(ies)?  Succeeding the disposed of the dispo	609 2244  er, if any:  NO  NO  NO  r disposed of on site.

necessary to change to an application for scoping and EIA.

If no, describe the emissions in terms of type and concentration:

#### 2. WATER USE

Indicate the	source(s) of water	that will be used	for the activity				
municipal	Directly from water board	groundwater	river, stream, dam or lake	other	the act	ivity will n water	ot use
site. Roads v		h water or an env	e project will be bought fro ironmentally friendly dust able limits.	_			
- Juo pioudoli	5, 11 augu 12 ga 1.010						
	be extracted from	•	er, stream, dam, lake or a	ny other natural	feature, pl	ease indic	ate liters
the volume t	nat will be extracte	od por month.			L		
			r supply, e.g. yield of bore		oropriate Ap	opendix	
	ivity require a wat e permits required	er use permit fron	n the Department of Water	er Affairs?	L		NO
11 y 00, 110t ti 10	pominio roganoa						
If you have y	ou applied for the	water use permit	t(a)2		Γ		
			d in appropriate appendix)	)			
3. POWER SUPPLY							
Please indica	ate the source of p	oower supply eg. I	Municipality / Eskom / Re	newable energy	source		
Generators							
If power sup	oly is not available	e, where will powe	r be sourced from?				
<b>-</b> .							
The proposed project will make use of generators to supply minimal electricity to the containers that will be present							
on site for office use.							
4. ENER	GY EFFICIEN	CY					
Describe the	design measures	if any that have	been taken to ensure that	at the activity is	enerav effic	rient:	
N/A	accigii incacarea	, ii ariy, triat riavo	boot taken to onears the	at the delivity le	onorgy onic	JIOTIL.	
Describe how	Describe how alternative energy sources have been taken into account or been built into the design of the activity, if				ivity, if		
N/A							

#### SECTION E: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts as well as the impacts of not implementing the activity (Section 24(4)(b)(i).

#### 1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summarise the issues raised by interested and affected parties.

During the initial public participation process the stakeholders and I&AP's were informed of the project by means of background information documents that were sent directly to the contact persons. An advertisement that was placed in The Beeld on 15 June 2022, and two (2) on-site notices were placed one at the entrance to the site and one at the Zwartkops Racecourse. A 30-days commenting period was allowed which expired on the 14 July 2022. No comments or objections have been received. In accordance with the timeframes stipulated in the EIA Regulations, as amended, the Draft Basic Assessment Report was compiled and will be distributed for comment and perusal to the I&AP's and stakeholders. A 30-day commenting period, ending 19 August 2022, was allowed for perusal of the documentation and submission of comments. The comments received on the Draft Basic Assessment Report (DBAR), were incorporated into the Final Basic Assessment Report (FBAR), which report will be submitted to the competent authority (CA) for final decision making. Proof of such consultation, which proof includes personal information of Interested & Affected Party ("participants"), is limited to documentation intended for the CA only. Said personal information shall not be distributed as part of the public documentation, for public comment, in terms of this application process. The above is to ensure the protection of personal information of participants, in line with the Protection of Personal Information Act 4 of 2013 ("POPIA"), including the lawful processing of said personal information by Greenmined Environmental (Ptv) Ltd ("Greenmined"), to which processing of personal information all participants consented to upon registration as participant. Participants that would like to inquire regarding specific information can do so by contacting Greenmined and by providing the necessary consent that authorizes such an individual to obtain said specific information.

Comments were received from the following stakeholders - please see appendix D for proof of correspondence:

City of Tshwane: Environmental Planning & Open Space Management Section

The Department recommends that the following issues be taken into consideration:

- a) A detailed flora survey must be undertaken to determine the status of specie abundance and occurrence on site. The report should be included within final Basic Assessment Report (BAR).
- b) A small section 1.9 ha (12% of the application area) has not yet been disturbed and should be regarded as a no-go area. Therefore, the proposed activities should be limited to existing developed/degraded footprints.
- c) Existing mining development in this zone must have a rehabilitation and closure plan that will ensure that the mine will be rehabilitated to a condition that is compatible to the preferred land uses of the zone as per requirements by Gauteng Provincial Environmental Management Framework (GPEMF), 2021.
- d) The proposed activities should exclude Zone 2: High Control Zone (Inside Urban Boundary) as an open space due to the presence of Ecological Support areas that must be conserved.
- e) The applicant should ensure that proposed activity is in line with the uses permitted on the proposed development area as per requirements by the Tshwane Town Planning Scheme 2008 (Revised

2014).

- f) Dolomite Stability Investigation Study should be conducted and approved by the relevant authority Council for Geoscience. The study including comments from the authority should be included within the final BAR.
- g) The storm water management plan must be compiled by an engineer and submitted to the City of Tshwane Roads and Transport Department for review, comments, and approval. Correspondence from Department should be included within the final BAR.
- h) The proposed activity should comply with the Gauteng Noise Control Regulations of 1999, provided that the noise mitigatory measures are in place and complied with at all times.
- i) Spill Contingency Plan must be compiled and included within the final BAR. must be compiled and included within the final BAR.
- j) Chemical sanitation facilities or system must be placed in such that prevent spills or leaks to the surrounding environment and must be maintained according to the operating instructions. The content thereof must be disposed of at an authorised wastewater treatment works.
- k) Should any artefacts, human remains, sites of cultural or archaeological importance be located, work must cease, and the South African Heritage Resource Agency (SAHRA) must be contacted immediately.
- Dust suppression measures should be in line National Dust Control Regulations, November 2013 to minimise and control airborne dust in the area.
- m) If the applicant is not the landowner, consent/approval from the landowners in terms of Regulation 39 of the NEMA EIA regulations regarding the proposed activity inside proposed site and should be included with the final BAR.
- All waste streams emanating from the proposed activity must be handled in term of the Section 16(1) of the National Environmental Management Waste Act 2008 (Act No 59 of 2008).
- General Rehabilitation plan should be compiled and included within the final BAR which will aim to prevent erosion and aid the return of natural, endemic, and indigenous vegetation cover to at least 80% of the rehabilitated area.
- p) All activities on site must comply with the City of Tshwane Municipality's By-Laws.
- q) The proposed activity must be constructed according to the finalised and approved Environmental Management Programme (EMPr). The EMPr should include all the above recommendations. The approved finalised EMPr is a legally binding document. An Environmental Control Officer (ECO) should be appointed for the proposed construction phase of the development to enforce the approved EMPr. The appointed ECO details should be included within the EMPr.
- Department of Agriculture and Rural Development

Regarding the above-mentioned draft Basic Assessment Report (BAR) received by the on 25 July 2022, herewith receive the comments from the Department.

#### 1. Description of the site/property/route and development

The development entails Lomeza Mining Services (Pty) Ltd stockpiling and sell material as a commercial product on a land previously used for mining purposes on Portion 240 of the Farm Zwartkop 356 JR, within the City of Tshwane Metropolitan Municipality

#### 2. Applicable legislation and policies

The National Environmental Management (NEMA) Act No.107 of 1998, National Environmental Management: Waste Act (NEMWA), Act No 59 of 2008, The National Environmental Management: Biodiversity Act, Act 10 of 2004, Mineral and Petroleum Resource Development Act (Act No 28 of 2002), National Environmental Biodiversity Act (2004), National Heritage Resource Act (Act No 25 of 1999), The Mine Health and Safety Act (Act No 29 of 1996). Gauteng Provincial Environmental Management Framework, 2015 (GPEMF, 2015) in terms of the Environmental Management.

#### 3. Description of the receiving environment

According to the Departmental Geographic Information the site fall within Ecological Support Area (ESA), Primary Vegetation The current zoning of the property is "Agriculture". The proposed site falls within Zone 1 Urban Development Zone and Zone 2 High Control Zone (Inside urban boundaries in terms of Gauteng Provincial Environmental Management Framework 2015, (GPEMF, 2015).

#### 4. Listed activities applied for

Activity No and description Description of the development related to the listed activity

Listing Notice 1, Activity 26

Residential, retail, recreational, tourism, commercial or institutional developments of 1 000 square metres or more, on land previously used for mining or heavy industrial purposes

Lomeza Mining Services (Pty) Ltd, intends to stockpile and sell material as a commercial product

#### Specialist studies

No Specialist report have been attached on the report. Therefore, all relevant reports must form part of the Final Report when submitting to the Department.

#### 6. Services required

Comments from the Local Authority with regards to the availability of bulk services to determine infrastructure capacity to cater for the development must be included in the final BAR. This must include assurance of water supply, electricity and roads upgrade to cater for the proposed activity. Further, the sewage drainage line/alignment must be confirmed and included in the Final BAR. In addition, a detailed storm water management plan for the site (including storm water management measures to be implemented temporarily during the construction phase and permanent measures to be installed for the operational phase) must be approved by the Local Municipality.

#### 7. Impacts Identification, Assessment and Mitigation

The assessment of environmental impacts associated with the proposed development must be evaluated according to its nature, extent, duration, intensity, probability, significance and propose mitigation measures of such impacts. The evaluation must include the assessment of direct and indirect impacts during construction and operational phase of the proposed development. The assessment should not only be limited to environmental impacts, but it must also investigate the socio-economic impacts (whether positive of negative) of the development and this assessment must form part of the Final BAR. In addition, the rating of impacts must be colorful to enhance understanding and visibility.

#### 8. Maps, layout plans, services route positioning

It is note that no layout map has been included in the report. please not that all layout plans including delineations must form part of the final BAR. In addition, a layout plan is required indicating the position of all the various structures and facilities that will be found on site. The layout plan must be legible with a legend easily linked to activity components and all sensitivities that are found on site should also be reflected and be overlaid.

#### 9. Public Participation Process

The Public participation process must be done in accordance with the minimum requirements of EIA Regulations 2014. Stakeholders must be consulted through delivery of draft BAR. Comments from all relevant stakeholders must be adequately addressed and submitted to this Department with the final BAR. Legible proof of correspondence (site notice, newspaper advertisement, email, fax, delivery etc.) with stakeholders must be incorporated on the Comments and Response report and be included in the final BAR. Should you be unable to submit comments, proof of attempts that were made to obtain comments must be attached. Please note that the success of this application may be prejudiced as a result of lack of willingness to address the issues herein as well as submission of inadequate information in support of the application.

#### South African National Heritage Resources

- In terms of the National Heritage Resources Act, no 25 of 1999, heritage resources, including archaeological or paleontological sites over 100 years old, graves older than 60 years, structures older than 60 years are protected. They may not be disturbed without a permit from the relevant heritage resources authority. This means that prior to development it is incumbent on the developer to ensure that a Heritage Impact Assessment is done. This must include the archaeological component (Phase 1) and any other applicable heritage components. Appropriate (Phase 2) mitigation, which involves recording, sampling and dating sites that are to be destroyed, must be done as required.
- If the property is very small or disturbed and there is no significant site the heritage specialist may choose
  to send a letter to the heritage authority motivating for exemption from having to undertake further heritage
  assessments.

#### National Department of Public Works & Infrastructure

- This Department of Public Works and Infrastructure has no objection in this particular development
  application as it is compatible with the surrounding developments and it does not change the character of
  the area but enhances it.
- Office of the regional Land Claims Commission

- We confirm that there is/are an existing land claims against the Property/ies. The claims were lodged as per attached list.
- Parliament has so far not been able to pass new legislation and has instead approached the Constitutional
   Court for an extension until 29 March 2019 and the application was rejected.
- The Commission will contact you directly and communicate widely once we have been granted permission to begin dealing with these claims.

Summary of response from the practitioner to the issues raised by the interested and affected parties (including the manner in which the public comments are incorporated or why they were not included)

(A full response must be provided in the Comments and Response Report that must be attached to this report):

As mentioned earlier, no comments were received on the Background Information Document that was sent on the 14th of June to all stakeholders and I&AP's. Therefore, no responses could be generated by the environmental practitioner

Responses were sent to the following stakeholders - please see appendix D for proof of correspondence:

City of Tshwane: Environmental Planning & Open Space Management Section

The Department recommends that the following issues be taken into consideration:

- a) Please refer to Appendix G1 for the ecological sensitivity report
- b) Comment noted this will be implemented and adhered to
- Please note this will not be a mining area but commercial stockpiling site please refer to Appendix F
  for the detailed description of the decommissioning phase
- d) Comment noted this will be implemented and adhered to
- e) Comment noted this will be implemented and adhered to
- f) Dolomite Stability Investigation Study will be conducted prior to commencement to be approved by the relevant authority Council for Geoscience – Please refer to Appendix G3 for geologist motivation
- g) Please refer to Appendix G2 for the Storm Water Management Plan
- h) Comment noted this will be implemented and adhered to
- i) Please refer to Appendix F for the Spill Contingency Plan
- j) Comment noted this will be implemented and adhered to
- k) Comment noted this will be implemented and adhered to
- I) Comment noted this will be implemented and adhered to
- m) Please refer to appendix D4 for the landowners consent
- n) Comment noted this will be implemented and adhered to

- o) Comment noted this will be implemented and adhered to
- p) Comment noted this will be implemented and adhered to
- q) Comment noted this will be implemented and adhered to
- Department of Agriculture and Rural Development

Regarding the above-mentioned draft Basic Assessment Report (BAR) received by the on 25 July 2022, herewith receive the comments from the Department.

- 1. Description of the site/property/route and development
- 2. Applicable legislation and policies
- 3. Description of the receiving environment
- 4. Listed activities applied for
- 5. Specialist studies
  - Please refer to Appendix G for specialist studies conducted
- 6. Services required
  - Please refer to Appendix G2 for the Storm Water Management Plan
- 7. Impacts Identification, Assessment and Mitigation
  - Please refer to Section E point 2 for the assessment of environmental impacts associated with the proposed development
- 8. Maps, layout plans, services route positioning
  - Please refer to Appendix C for the layout plan
- 9. Public Participation Process
  - Please refer to Appendix D for the public participation process
- South African National Heritage Resources
  - A heritage specialist will be consulted motivating for exemption from having to undertake further heritage assessments prior to commencement.
- National Department of Public Works & Infrastructure
  - All comments received for you will be incorporated in the Final Basic Assessment Report to be submitted to the decision maker for their consideration.
  - We thank you for taking part in this public participation process, you will be notified as soon as a decision has been taken regarding this application.

- We trust you will find this in order. Please do not hesitate to contact us in the event of any uncertainties.
- Office of the regional Land Claims Commission
  - All comments received for you will be incorporated in the Final Basic Assessment Report to be submitted to the decision maker for their consideration.
  - We thank you for taking part in this public participation process, you will be notified as soon as a decision has been taken regarding this application.
  - We trust you will find this in order. Please do not hesitate to contact us in the event of any uncertainties.

#### 2. IMPACTS THAT MAY RESULT FROM THE CONSTRUCTION AND OPERATIONAL PHASE

Briefly describe the methodology utilised in the rating of significance of impacts

Please see the description of the methodology below

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the construction phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

Methodology for the assessment of the potential environmental, social and cultural impacts

#### **DEFINITIONS AND CONCEPTS:**

#### **Environmental significance:**

The concept of significance is at the core of impact identification, evaluation and decision-making. The concept remains largely undefined and there is no international consensus on a single definition. The following common elements are recognised from the various interpretations:

- Environmental significance is a value judgement
- The degree of environmental significance depends on the nature of the impact
- The importance is rated in terms of both biophysical and socio-economic values
- Determining significance involves the amount of change to the environment perceived to be acceptable to affected communities.

Significance can be differentiated into impact magnitude and impact significance. Impact magnitude is the measurable change (i.e. intensity, duration and likelihood). Impact significance is the value placed on the change by different affected parties (i.e. level of acceptability) (DEAT (2002) Impact Significance, Integrated Environmental Management, Information Series 5).

The concept of risk has two dimensions, namely the consequence of an event or set of circumstances, and the likelihood of particular consequences being realised (Environment Australia (1999) Environmental Risk Management).

#### **Impact**

The positive or negative effects on human well-being and / or the environment.

#### Consequence

The intermediate or final outcome of an event or situation OR it is the result, on the environment, of an event.

#### Likelihood

A qualitative term covering both probability and frequency.

#### **Frequency**

The number of occurrences of a defined event in a given time or rate.

#### **Probability**

The likelihood of a specific outcome measured by the ratio of a specific outcome to the total number of possible outcomes.

#### **Environment**

Surroundings in which an organisation operates, including air, water, land, natural resources, flora, fauna, humans and their interrelation (ISO 14004, 1996).

#### Methodology that will be used

The environmental significance assessment methodology is based on the following determination:

#### Environmental Significance = Overall Consequence x Overall Likelihood

#### **Determination of Overall Consequence**

Consequence analysis is a mixture of quantitative and qualitative information and the outcome can be positive or negative. Several factors can be used to determine consequence. For the purpose of determining the environmental significance in terms of consequence, the following factors were chosen: **Severity/Intensity, Duration and Extent/Spatial Scale**. Each factor is assigned a rating of 1 to 5, as described in the tables below.

#### Determination of Severity / Intensity

**Severity** relates to the nature of the event, aspect or impact to the environment and describes how severe the aspects impact on the biophysical and socio-economic environment.

Table 1 will be used to obtain an overall rating for severity, taking into consideration the various criteria.

#### Rating of Severity:

Type of criteria	Rating				
	1	2	3	4	5
Quantitative	0-20%	21-40%	41-60%	61-80%	81-100%
Qualitative	Insignifiant / Non- harmful	Small / Potentially harmful	Significant/ Harmful	Great/ Very harmful	Disastrous Extremely harmful
Social/ Community response	Acceptable / I&AP satisfied	Slightly tolerable / Possible objections	Intolerable/ Sporadic complaints	Unacceptable / Widespread complaints	Totally unacceptable / Possible legal action
Irreversibility	Very low cost to mitigate/ High potential to mitigate impacts to level of insignificance/ Easily reversible	Low cost to mitigate	Substantial cost to mitigate/ Potential to mitigate impacts/ Potential to reverse impact	High cost to mitigate	Prohibitive cost to mitigate/ Little or no mechanism to mitigate impact Irreversible
Biophysical (Air quality, water quantity and quality, waste production, fauna and flora)	Insignificant change / deterioration or disturbance	Moderate change / deterioration or disturbance	Significant change / deterioration or disturbance	Very significant change / deterioration or disturbance	Disastrous change / deterioration or disturbance

#### **Determination of Duration**

Duration refers to the amount of time that the environment will be affected by the event, risk or impact, if no intervention e.g. remedial action takes place.

#### **Rating of Duration:**

Rating	Description
1	Up to ONE MONTH
2	ONE MONTH to THREE MONTHS (QUARTER)
3	THREE MONTHS to ONE YEAR
4	ONE to TEN YEARS
5	Beyond TEN YEARS

#### Determination of Extent/Spatial Scale

Extent or spatial scale is the area affected by the event, aspect or impact.

#### Rating of Extent / Spatial Scale:

Rating	Description
1	Immediate, fully contained area
2	Surrounding area
3	Within Business Unit area of responsibility
4	Within the farm/neighboring farm area
5	Regional, National, International

#### **Determination of Overall Consequence**

Overall consequence is determined by adding the factors determined above and summarized below, and then dividing the sum by 3.

#### **Example of calculating Overall Consequence**

Consequence	Rating
Severity	Example 4
Duration	Example 2
Extent	Example 4
SUBTOTAL	10
TOTAL CONSEQUENCE: (Subtotal divided by 3)	3.3

#### **Determination of Likelihood:**

The determination of likelihood is a combination of Frequency and Probability. Each factor is assigned a rating of 1 to 5, as described below and in tables 6 and 7.

#### **Determination of Frequency**

Frequency refers to how often the specific activity, related to the event, aspect or impact, is undertaken.

#### Rating of Frequency:

Rating	Description
1	Once a year or once/more during operation
2	Once/more in 6 Months
3	Once/more a Month
4	Once/more a Week
5	Daily

#### Determination of Probability

Probability refers to how often the activity or aspect has an impact on the environment.

#### **Rating of Probability**

Rating	Description
1	Almost never / almost impossible

2	Very seldom / highly unlikely
3	Infrequent / unlikely / seldom
4	Often / regularly / likely / possible
5	Daily / highly likely / definitely

#### Overall Likelihood

Overall likelihood is calculated by adding the factors determined above and summarised below, and then dividing the sum by 2.

#### **Example of calculating Overall Likelihood**

Consequence	Rating
Frequency	Example 4
Probability	Example 2
SUBTOTAL	6
TOTAL LIKELIHOOD	2
(Subtotal divided by 2)	S .

#### **Determination of Overall Environmental Significance:**

The multiplication of overall consequence with overall likelihood will provide the environmental significance, which is a number that will then fall into a range of **LOW**, **LOW-MEDIUM**, **MEDIUM-HIGH** or **HIGH**, as shown in the table below.

#### **Determination of Overall Environmental Significance**

Significance or Risk	Low	Low-Medium	Medium	Medium-High	High
Overall Consequence X Overall Likelihood	1 - 4.9	5 - 9.9	10 - 14.9	15 – 19.9	20 - 25

#### Qualitative description or magnitude of Environmental Significance

This description is qualitative and is an indication of the nature or magnitude of the Environmental Significance. It also guides the prioritisations and decision making process associated with this event, aspect or impact.

#### Description of Environmental Significance and related action required

Significance	Low	Low-Medium	Medium	Medium-High	High
Impact Magnitude	Impact is of very low order and therefore likely to have very little real effect. Acceptable.	Impact is of low order and therefore likely to have little real effect. Acceptable.	Impact is real, and potentially substantial in relation to other impacts. Can pose a risk to company	Impact is real and substantial in relation to other impacts. Pose a risk to the company. Unacceptable	Impact is of the highest order possible. Unacceptable. Fatal flaw.
Action Required	Maintain current management measures. Where possible improve.	Maintain current management measures. Implement monitoring and evaluate to determine potential increase in risk. Where possible improve	Implement monitoring. Investigate mitigation measures and improve management measures to reduce risk, where possible.	Improve management measures to reduce risk.	Implement significant mitigation measures or implement alternatives.

Based on the above, the significance rating scale has been determined as follows:

High	Of the highest order possible within the bounds of impacts which could occur. In the case of negative impacts, there would be no possible mitigation and / or remedial activity to offset the impact at the spatial or time scale for which it was predicted. In the case of positive impacts, there is no real alternative to achieving the benefit.
Medium-High	Impacts of a substantial order. In the case of negative impacts, mitigation and / or remedial activity would be feasible but difficult, expensive, time-consuming or some combination of these. In the case of positive impacts, other means of achieving this benefit would be feasible, but these would be more difficult, expensive, time-consuming or some combination of these.
Medium	Impact would be real but not substantial within the bounds of those, which could occur. In the case of negative impacts, mitigation and / or remedial activity would be both feasible and fairly easily possible, In case of positive impacts; other means of achieving these benefits would be about equal in time, cost and effort.
Low-Medium	Impact would be of a low order and with little real effect. In the case of negative impacts, mitigation and / or remedial activity would be either easily achieved of little would be required, or both. In case of positive impacts alternative means for achieving this benefit would likely be easier, cheaper, more effective, less time-consuming, or some combination of these.
Low	Impact would be negligible. In the case of negative impacts, almost no mitigation and or remedial activity would be needed, and any minor steps, which might be needed, would be easy, cheap and simple. In the case of positive impacts, alternative means would almost all likely be better, in one or a number of ways, than this means of achieving the benefit
Insignificant	There would be a no impact at all – not even a very low impact on the system or any of its parts.

#### **OPERATIONAL PHASE**

Visual intrusion associated with the stockpiled material and vehicles transporting the material

								:	Significance	)		
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	edium		Site Layout Alte	ernative 1			Degr	ee of Mi	itigation: N	one		
2	4	1	2.3	3	5	4		9.2				

Work opportunities to local residents (Positive Impact)

							Significance						
									Low-		Medium-		
			Consequence					Low	Medium	Medium	High	High	
								1 -		10 110	15 –	20 -	
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	10 - 14.9	19.9	25	
Rating: M	edium		Site Layout Alte	ernative 1			Degr	ee of M	itigation: N	one			
4	4	5	4.6	5	5	5		23					

Weed and invader plant infestation of the area

							Significance						
									Low-		Medium-		
			Consequence					Low	Medium	Medium	High	High	
								1 -		10 - 14.9	15 –	20 -	
Severity	Duration	Extent		Probability	Frequency	Likelil	hood	4.9	5 - 9.9	10 - 14.9	19.9	25	
Rating: M	edium		Site Layout Alte	ernative 1			Degr	ee of M	itigation: N	one			
3	4	1	2.6	4	2	3		7.8					

Loss of material due to ineffective storm water handling

							Significance						
									Low-		Medium-		
			Consequence					Low	Medium	Medium	High	High	
								1 -		10 - 14.9	15 –	20 -	
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	10 - 14.9	19.9	25	
Rating: M	edium		Site Layout Alte	ernative 1			Degr	ee of M	itigation: N	one			
3	4	1	2.6	4	3	3.5		9.1					

Dust nuisance from stockpiled material and vehicles transporting the material

								;	Significance	•		
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	edium		Site Layout Alte	ernative 1			Degr	ee of M	itigation: N	one		
4	4	2	3.3	5	4	4.5		14.9				

#### Degradation of access roads

							Significance						
									Low-		Medium-		
			Consequence					Low	Medium	Medium	High	High	
								1 -		10 - 14.9	15 –	20 -	
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	10 - 14.9	19.9	25	
Rating: M	edium		Site Layout Alte	ernative 1			Degr	ee of M	itigation: No	one			
4	4	3	3.6	4	4	4		14.4					

#### Noise nuisance caused by vehicles

									:	Significance	9	
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	edium		Site Layout Alte	ernative 1			Degr	ee of M	itigation: N	one		
4	4	2	3.3	4	4	4		13.2				

#### Contamination of area with hydrocarbons or hazardous waste materials

									Significance	)		
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	edium		Site Layout Alte	ernative 1			Degr	ee of M	itigation: N	one		
3	4	2	3	4	3	3.5		10.5				

#### Overloading of trucks impacting road infrastructure

							Significance						
									Low-		Medium-		
			Consequence	nsequence					Medium	Medium	High	High	
								1 -		10 - 14.9	15 –	20 -	
Severity	Duration	Extent		Probability	Frequency	Likelihood		4.9	5 - 9.9	10 - 14.9	19.9	25	
Rating: M	edium		Site Layout Alternative 1				Degr	gree of Mitigation: None					
3	4	2	3	4	3	3.5		10.5					

#### Soil erosion

							Significance						
									Low-		Medium-		
			Consequence				Low	Medium	Medium	High	High		
								1 -		10 - 14.9	15 –	20 -	
Severity	Duration	Extent		Probability	Frequency	Likelihood		4.9	5 - 9.9	10 - 14.9	19.9	25	
Rating: M	edium		Site Layout Alternative 1				Degree of Mitigation: None						
4	5	1	3.3	4	5	4.5		14.9					

# **DECOMMISIONING PHASE**

Visual intrusion associated with the rehabilitation of the area

					Significance							
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	Rating: Medium			Site Layout Alternative 1			Degree of Mitigation: None					
3	3	1	2.3	2	2	2		4.6				

Dust nuisance caused during sloping and landscaping activities

								,	Significance	9		
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	Rating: Medium			Site Layout Alternative 1			Degr	ree of Mitigation: None				
3	4	1	2.6	4	2	3		7.8				

Noise nuisance caused by machinery

							Significance					
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	Rating: Medium Site Layo			ternative 1			Degr	ee of Mitigation: None				
3	2	2	2.3	4	2	3		6.9				

Contamination of area with hydrocarbons or hazardous waste materials

					Significance							
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	hood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	Rating: Medium Site Layout Alte			ernative 1		Degree of Mitigation: None						
3	2	1	2	4	2	3		6				

# Infestation of the area by weed and invader plants

					Significance							
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	Rating: Medium			Site Layout Alternative 1			Degr	Degree of Mitigation: None				
3	4	1	2.6	4	3	3.5		9.1				

Table 2: iv) Impacts to be mitigated in their respective phases

# Proposal

POTENTIAL IMPACTS:	SIGNIFICANCE RATING OF IMPACTS (POSITIVE OR NEGATIVE):	PROPOSED MITIGATION:	SIGNIFICANCE RATING OF IMPACTS AFTER MITIGATION:	RISK OF THE IMPACT AND MITIGATION NOT BEING IMPLEMENTED
OPERATIONAL PHASE:				
Visual intrusion associated with the stockpiled material and vehicles transporting the material	Low - Medium (negative)	<ul> <li>The site needs to have a neat appearance and be kept in good condition at all times.</li> <li>Upon closure the site needs to be rehabilitated and sloped to insure that the visual impact on the aesthetic value of the area is kept to a minimum.</li> <li>All activities must take place within the boundaries of the site.</li> </ul>	Low - Medium (negative)	The significance rating of this impact will only increase (negative) if no mitigation measures are implemented
Weed and invader plant infestation of the area	Low – Medium (negative)	A weed and invader plant control management plan must be implemented at the site to ensure eradication of all listed invader plants in terms of Conservation of	Low (negative)	The significance rating of this impact will only increase (negative) if no mitigation measures are implemented

		Agricultural Act (Act No 43 1983).	
		Management must take responsibility to control declared invader or exotic species on the	
		rehabilitated areas. The following control methods can be used:	
		"The plants can be uprooted, felled or cut off and can be destroyed completely."	
		"The plants can be treated with an herbicide that is registered for use in connection therewith and in accordance with the directions for the use of such an herbicide."	
		The temporary stockpiles needs to be kept free of weeds.	
Loss of material due to ineffective storm water handling	Low – Medium (negative)	around the stockpile areas and access roads to prevent erosion (ne	ne significance rating of this pact will only increase egative) if no mitigation easures are implemented.
		Runoff water must also be diverted around the stockpile areas with trenches and contour structures to prevent erosion of the work areas.	

The activities must be conducted only in accordance with the Best Practice Guideline that relates to storm water management, erosion and sediment control and waste management, developed by the Department of Water Affairs (DWA), and any other conditions which that Department may impose:
Clean water (e.g. rainwater) must be kept clean and be routed to a natural watercourse by a system separate from the dirty water system. You must prevent clean water from running or spilling into dirty water systems.
Dirty water must be collected and contained in a system separate from the clean water system.
Dirty water must be prevented from spilling or seeping into clean water systems.
The storm water management plan must apply for the entire life cycle of the activites and over different hydrological cycles (rainfall patterns).

		The statutory requirements of various regulatory agencies and the interests of stakeholders must be considered and incorporated into the storm water management plan.	
Dust nuisance from stockpiled material and vehicles transporting the material	Low – Medium (negative)	The liberation of dust into the surrounding environment must be effectively controlled by the use of, inter alia, water spraying and/or other dust-allaying agents.  The site manager must ensure continuous assessment of all dust suppression equipment to confirm its effectiveness in addressing dust suppression.	The significance rating of this impact will only increase (negative) if no mitigation measures are implemented.
		<ul> <li>Speed on the access roads must be limited to 40km/h to prevent the generation of excess dust.</li> <li>Roads must be sprayed with water or an environmentally friendly dust-allaying agent that contains no PCB's (e.g. DAS products) if dust is generated above acceptable limits.</li> </ul>	

		All stockpiles must thoroughly be soaked to ensure dust suppression on the site.	
Degradation of access roads	Medium (negative)	Newly constructed access roads (if applicable) must be adequately maintained so as to minimise dust, erosion or undue surface damage.  Storm water should be diverted around the access roads to prevent erosion.  Erosion of access road: Vehicular movement must be restricted to existing access routes to prevent crisscrossing of tracks through undisturbed areas. Rutting and erosion of the access road caused as a result of the activities should be repaired by the applicant.	The significance rating of this impact will only increase (negative) if no mitigation measures are implemented.
Noise nuisance caused by vehicles	Medium (negative)	The applicant must ensure that employees and staff conduct themselves in an acceptable manner while on site.	The significance rating of this impact will only increase (negative) if no mitigation measures are implemented.

		All vehicles must be equipped with silencers and maintained in a road worthy condition in terms of the Road Transport Act.
Overloading of trucks impacting road infrastructure	Medium (negative)	A weighing devise must be installed at the proposed area to prevent overloading.  Proof of load weights must be filed and be available for auditing by relevant officials.  Low – Medium (negative)  The significance rating of this impact will only increase (negative) if no mitigation measures are implemented.
Contamination of area with hydrocarbons or hazardous waste materials	Medium (negative)	No processing area or waste pile may be established within 100m of the edge of any river channel or other water bodies.  Low (negative))  The significance rating of this impact will only increase (negative) if no mitigation measures are implemented.
		Should any emergency vehicle repairs be done all spills must be disposed of in a 200 litre closed container/bin found inside the emergency service area.
		Any effluents containing oil, grease or other industrial substances must be collected in a suitable receptacle and removed

	from the site, either for resale or	
	for appropriate disposal at a	
	recognised facility.	
-	Spills must be cleaned up	
	immediately to the satisfaction of	
	the Regional Manager by	
	removing the spillage together	
	with the polluted soil and by	
	disposing of them at a recognised	
	facility.	
	<i></i>	
	Suitable covered receptacles	
	must be available at all times and	
	conveniently placed for the	
	disposal of waste.	
	dioposai ei waste.	
	Non-biodegradable refuse such	
	as glass bottles, plastic bags,	
	metal scrap, etc., must be stored	
	in a container with a closable lid	
	at a collecting point and collected	
	on a regular basis and disposed	
	of at a recognised landfill site.	
	Specific precautions should be	
	taken to prevent refuse from	
	being dumped on or in the vicinity	
	of the area.	
Letter Land		
	Biodegradable refuse generated	
	must be handled as indicated	
	above.	

Soil erosion	Medium (negative)	*	The necessary measures will be put in place to limit erosion from the stockpiles and to divert storm water away.	Low - medium (negative)	The significance rating of this impact will only increase (negative) if no mitigation measures are implemented.
		*	Runoff water will be diverted around the site with trenches and contour structures to prevent erosion of the work areas.		
		*	Adequate drainage and erosion protection in the form of cut-off berms or trenches will be provided where necessary.		
		*	The area should be landscaped and profiled with acceptable contours and erosion control measures.		

# 3. IMPACTS THAT MAY RESULT FROM THE DECOMISSIONING AND CLOSURE PHASE

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the decommissioning and closure phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

#### Proposal

POTENTIAL IMPACTS:	SIGNIFICANCE RATING OF IMPACTS(POSITIVE OR NEGATIVE):	PROPOSED MITIGATION:	SIGNIFICANCE RATING OF IMPACTS AFTER MITIGATION:	RISK OF THE IMPACT AND MITIGATION NOT BEING IMPLEMENTED
Visual intrusion associated with the rehabilitation of the area	Low (negative)	<ul> <li>The site needs to have a neat appearance and be kept in good condition at all times.</li> <li>Upon closure the site needs to be rehabilitated and sloped to insure that the visual impact on the aesthetic value of the area is kept to a minimum.</li> <li>All activities must take place within the boundaries of the site</li> </ul>	Low (negative)	The significance rating of this impact will only increase (negative) if no mitigation measures are implemented
Dust nuisance caused during sloping and landscaping activities	Low – Medium (negative)	The liberation of dust into the surrounding environment must be effectively controlled by the use of, inter alia, water spraying and/or other dust-allaying agents.  The site manager must ensure continuous assessment of all dust suppression equipment to confirm its effectiveness in addressing dust suppression.	Low (negative)	The significance rating of this impact will only increase (negative) if no mitigation measures are implemented.

	T				
		*	Speed on the access roads must be limited to 40km/h to prevent the generation of excess dust.  Roads must be sprayed with water or an environmentally friendly dust-allaying agent that		
			contains no PCB's (e.g. DAS products) if dust is generated above acceptable limits.		
			All stockpiles must thoroughly be soaked to ensure dust suppression on the site.		
Noise nuisance caused by machinery	Low – Medium (negative)	*	The applicant must ensure that employees and staff conduct themselves in an acceptable manner while on site.	Low (negative)	The significance rating of this impact will only increase (negative) if no mitigation measures are implemented.
		*	All vehicles must be equipped with silencers and maintained in a road worthy condition in terms of the Road Transport Act.		
Contamination of area with hydrocarbons or hazardous waste materials	Low – Medium (negative)	*	No processing area or waste pile may be established within 100m of the edge of any river channel or	Low (negative)	The significance rating of this impact will only increase (negative) if no mitigation measures are implemented.

other water bodies.	
Should any emergency vehicle	
repairs be done all spills must be	
disposed of in a 200 litre closed	
container/bin found inside the	
emergency service area.	
Any effluents containing oil,	
grease or other industrial	
substances must be collected in a	
suitable receptacle and removed	
from the site, either for resale or	
for appropriate disposal at a	
recognised facility.	
Spills must be cleaned up	
immediately to the satisfaction of	
the Regional Manager by	
removing the spillage together	
with the polluted soil and by	
disposing of them at a recognised	
facility.	
■ Suitable covered receptacles	
must be available at all times and	
conveniently placed for the	
disposal of waste.	
Non-biodegradable refuse such	
as glass bottles, plastic bags,	
metal scrap, etc., must be stored	
in a container with a closable lid at	

		*	a collecting point and collected on a regular basis and disposed of at a recognised landfill site. Specific precautions should be taken to prevent refuse from being dumped on or in the vicinity of the stockpile area.  Biodegradable refuse generated must be handled as indicated above.		
Infestation of the reinstated area with invader plant species.	Low – Medium (negative)	*	A weed and invader plant control management plan must be implemented at the site to ensure eradication of all listed invader plants in terms of Conservation of Agricultural Act (Act No 43 1983).  Management must take responsibility to control declared invader or exotic species on the rehabilitated areas. The following control methods can be used:	Low (negative)	The significance rating of this impact will only increase (negative) if no mitigation measures are implemented.
		* *	"The plants can be uprooted, felled or cut off and can be destroyed completely."  "The plants can be treated with an herbicide that is registered for use		

in connection therewith and in	
accordance with the directions for	
the use of such an herbicide.	
"The stockpiles needs to be kept free of weeds.	

During the impact assessment process the following potential impacts were identified of each main activity in each phase. An initial significance rating was determined for each potential impact should the mitigation measures proposed in this document not be implemented on-site. The impact assessment process then continued in identifying mitigation measures to address the impact that the proposed activity may have on the surrounding environment.

The significance rating was again determined for each impact using the methodology as explained under vi) Methodology Used in Determining and Ranking the Significance. The impact ratings listed below was determined for each impact after bringing the proposed mitigation measures into consideration and therefore represents the final layout/activity proposal.

#### **OPERATIONAL PHASE**

Visual intrusion associated with the stockpiled material and vehicles transporting the material

										Significance	•	
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	edium		Site Layout Alte	ernative 1	Degree of Mitigation: None							
1	3	1	1.6	3 4		3.5		5.8				

Work opportunities to local residents (Positive Impact)

									:	Significance	9	
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	hood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	edium		Site Layout Alte	ernative 1		Degree of Mitigation: None						
4	4	5	4.6	5 5		5		23				

Weed and invader plant infestation of the area

										Significance	9	
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	hood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	edium		Site Layout Alte	ernative 1		Degree of Mitigation: None						
2	3	1	2	2 2		2	2 4					

Loss of material due to ineffective storm water handling

									;	Significance	•	
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	hood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	edium		Site Layout Alte	ernative 1		Degr	gree of Mitigation: None					
3	3	1	2.3	2	2		4.6					

Dust nuisance from stockpiled material and vehicles transporting the material

										Significance	е	
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 -	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	14.9	19.9	25
Rating: Me	edium		Site Layout Alte	native 1		Degr		ree of Mitigation: None				
2	2	1	1.6	3 3		3		5				

# Degradation of access roads

										Significance	•	
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	edium		Site Layout Alte	ernative 1		Degree of Mitigation: None						
3	2	1	2	2 2		2		4				

Noise nuisance caused by vehicles

										Significance	9	
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelih	nood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	edium		Site Layout Alte	e Layout Alternative 1			Degr	ee of M	tigation: No	one		
3	2	1	2	2	3	2.5		5				

# Overloading of trucks impacting road infrastructure

									;	Significance	)	
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	hood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	edium		Site Layout Alte	Site Layout Alternative 1			Degr	ee of M	itigation: N	one		
2	4	2	2.6	2 3 2				6.5				

Contamination of area with hydrocarbons or hazardous waste materials

										Significance	9	
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	edium		Site Layout Alte	Site Layout Alternative 1			Degr	ee of Mi	tigation: No	one		
2	2	1	1.6	2 3 2		2.5		4.2				

# Soil erosion

				Consequence Probability Frequency					(	Significance	9	
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	edium		Site Layout Alte	, , ,			Degr	ee of M	itigation: No	one		
2	5	1	2.6	2 5				9.1				

# **DECOMMISIONING PHASE**

Visual intrusion associated with the rehabilitation of the area

	ity Duration Extent								,	Significance	Э	
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	hood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	edium		Site Layout Alte	Site Layout Alternative 1			Degr	ee of M	itigation: N	one		
3	3	1	2.3	2 2 2		2		4.6				

Dust nuisance caused during sloping and landscaping activities

										Significand	e	
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 -	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	14.9	19.9	25
Rating: M	edium		Site Layout Alt	, , , ,			Degr	ee of M	itigation: N	one		
3	1	1	1.6	3 1 2				3.2				

Noise nuisance caused by machinery

	Consequence  Direction Extent									Significand	e	
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 -	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	14.9	19.9	25
Rating: M	edium		Site Layout Alt	Site Layout Alternative 1			Degr	ee of M	itigation: N	one		
2	1	1	1.3	2 2				2.6				

Contamination of area with hydrocarbons or hazardous waste materials

										Significand	e	
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 -	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	14.9	19.9	25
Rating: M	edium		Site Layout Alt	Site Layout Alternative 1			Degr	ee of M	itigation: N	one		
2	1	1	1.3	2 2				2.6				

Infestation of the area by weed and invader plants

									:	Significan	се	
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 -	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	14.9	19.9	25
Rating: M	ledium		Site Layout Alt	Alternative 1			Degr	ee of M	itigation: N	lone		
3	1	1	1.6	3 1 :				3.2				

List any specialist reports that were used to fill in the above tables. Such reports are to be attached in the appropriate Appendix.

N/A

Where applicable indicate the detailed financial provisions for rehabilitation, closure and ongoing post decommissioning management for the negative environmental impacts.

N/A

# 4. CUMULATIVE IMPACTS

Describe potential impacts that, on their own may not be significant, but is significant when added to the impact of other activities or existing impacts in the environment. Substantiate response:

The cumulative impacts associated with the proposed area could be the following:

- Additional traffic on the local roads during operational phase,
- The influx of people into the area during operational phase,
- Increase in dust and noise generation.

Additional traffic on the local roads during operational phase.

				Probability Frequency					:	Significance	9	
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	edium		Site Layout Alte	, , ,			Degr	ee of M	itigation: N	one		
2	4	2	2.6	2 5		3.5		9.1				

The influx of people into the area during operational phase.

									;	Significance	•	
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	edium		Site Layout Alte	, , ,			Degr	ee of M	itigation: N	one		
2	4	2	2.6	2	5	3.5		9.1				

Additional water supply to the area.

			Consequence						,	Significance	)	
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	edium		Site Layout Alte	ernative 1		Degr	ee of M	itigation: No	one			
2	4	1	2.3	2	4	3		6.9				

Increase in dust and noise generation.

							Significance					
									Low-		Medium-	
			Consequence					Low	Medium	Medium	High	High
								1 -		10 - 14.9	15 –	20 -
Severity	Duration	Extent		Probability	Frequency	Likelil	nood	4.9	5 - 9.9	10 - 14.9	19.9	25
Rating: M	Rating: Medium Site Layout			ernative 1			Degr	ee of M	itigation: N	one		
3	4	2	3	2	4	3		9				

# 5. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that sums up the impact that the proposal and its alternatives may have on the environment after the management and mitigation of impacts

have been taken into account with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

#### **ENVIRONMENTAL IMPACT STATEMENT** Proposed area **TYPE OF IMPACT DURATION LIKELIHOOD SIGNIFICANCE** Operational phase: Duration of site Visual intrusion associated with the stockpiled operational phase Possible Low Medium Concern material and vehicles transporting the material (>1 month) Work opportunities to local residents (Positive Definite High (+) **Low Possibility** Low Concern Weed and invader plant infestation of the area. Loss of material due to ineffective storm water handling. **Low Possibility** Low Concern Dust nuisance from stockpiled material and **Low Medium Concern** vehicles transporting the material **Low Possibility** Degradation of access roads Noise nuisance caused by vehicles Low Concern **Low Possibility** Low Medium Concern Overloading of trucks impacting road **Low Possibility** infrastructure **Low Possibility** Low Concern Contamination of area with hydrocarbons or hazardous waste materials **Soil Erosion Low Medium Concern Decommissioning and closure phase: LIKELIHOOD SIGNIFICANCE** Visual intrusion associated with the **Duration of** Low Possibility Low Concern rehabilitation of the area decommissioning phase Dust nuisance caused during sloping and (±2 months) Low Possibility Low Concern landscaping activities. Noise nuisance caused by machinery. Low Concern **Low Possibility** Contamination of area with hydrocarbons or **Low Possibility** Low Concern hazardous waste materials Infestation of the reinstated area with invader **Low Possibility** Low Concern plant species. Low Possibility Low Concern **Cumulative Impacts Duration of site** LIKELIHOOD **SIGNIFICANCE** Additional traffic on the local roads during operational phase Low Possibility **Low Medium Concern** operational phase. (>1 month) The influx of people into the area during Low Possibility **Low Medium Concern** operational phase.

	ENVIRONMENTAL IMPACT STATEMENT					
	Proposed area					
-	Additional water supply to the area.		Low Possibility	Low Medium Concern		
*	Increase in dust and noise generation.		Low Possibility	Low Medium Concern		

### 6. IMPACT SUMMARY OF THE PROPOSAL OR PREFERRED ALTERNATIVE

For proposal:

### Operational phase:

- Visual intrusion associated with the stockpiled material and vehicles transporting the material Low Medium Concern
- Work opportunities to local residents (Positive Impact) High (+)
- Loss of material due to ineffective storm water handling Low Concern
- Weed and invader plant infestation of the area Low Concern
- Dust nuisance from the stockpiled material and vehicles transporting the material **Low Medium**Concern
- Degradation of access roads Low Concern
- Noise nuisance caused by vehicles Low Medium Concern
- Overloading of trucks impacting road infrastructure Low Medium Concern
- Contamination of area with hydrocarbons or hazardous waste materials Low Concern
- Soil erosion Low Medium Concern

#### Decommissioning and closure phase:

- Visual intrusion associated with the rehabilitation of the area Low Concern
- Dust nuisance caused during sloping and landscaping activities Low Concern
- Noise nuisance caused by machinery Low Concern
- Contamination of area with hydrocarbons or hazardous waste materials Low Concern
- Infestation of the area by weed and invader plants Low Concern

### **Cumulative Impacts:**

Additional traffic on the local roads during operational phase Low Medium Concern

- The influx of people into the area during operational phase Low Medium Concern
- Additional water supply to the area Low Medium Concern
- Increase in dust and noise generation Low Medium Concern

Having assessed the significance of impacts of the proposal and alternative(s), please provide an overall summary and reasons for selecting the proposal or preferred alternative.

The applicant, Lomeza Mining Services (Pty) Ltd, intends to stockpile and sell current and future material as a commercial product on portion 240 of the Farm Zwartkop 356 JR, City of Tswane, Gauteng Province to various clients in the Road and Infrastructure industries

The above-mentioned area is a site previously used for mining purposes, therefore the proposed area has already been disturb. Thus, the applicant will not explore any other site alternatives or disturb any other area.

### 7. SPATIAL DEVELOPMENT TOOLS

Indicate the application of any spatial development tool protocols on the proposed development and the outcome thereof.

According to the Metropolitan Spatial Development Framework 2021 (MSDF), region 4 is one of the more affluent regions in Tshwane. Its strategic location along the border with Johannesburg means that it has progressively developed further towards the south as the growing attraction to the convenience and economic sense of its location has grabbed the attention of many investors. Highveld Technopark is one development that is testament to this.

Other predominant land uses of strategic significance include the Swartkop and Waterkloof military airports, Centurion CBD, Sunderland Ridge industrial area, N1 corridor (commercial development), Louwlardia commercial and industrial area, and Samrand. The Gautrain station in Centurion has added impetus to development in and around the area.

Apart from infrastructure requirements and development trends, the low densities are also influenced by the underlying dolomite in the area. Vacant areas in the suburban environment have developed extensively over time. There still exists an opportunity to extend residential developments in the westerly direction (Monavoni and surrounds). Though well serviced, the provision of bulk services is lagging behind the rapid population growth. Existing infrastructure requires upgrading and maintenance.

In light of the above, the proposed development can be considered to align with the MSDF for the most part. The proposed activities will contribute to the upgrading and maintenance of the existing infrastructure by increasing the availability of the commercial product. Thus, the proposed development may be considered to align with the MSDF.

### 8. RECOMMENDATION OF THE PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the Environmental Assessment Practitioner as bound by professional ethical standards and the code of conduct of EAPASA).

VEC	
YES	
	1

If "NO", indicate the aspects that require further assessment before a decision can be made (list the aspects that require further assessment):

If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application:

The management objectives listed in the EMPr (attached as Appendix F) under Part 7 *Mechanisms for Monitoring Compliance with and Performance Assessment the Environmental Management Programme and Reporting thereon*, should be considered for inclusion in the environmental authorization which includes the following:

#### Visual characteristics

- Contain activities to the boundaries of the permitted area.
- Ensure that the site have a neat appearance and is kept in good condition at all times.
- Rehabilitate and level the site upon closure to ensure that the visual impact on the aesthetic value of the area is kept to a minimum.

### Groundcover

- All invasive plant species that germinate within the boundary of the layer facility must be controlled in terms of NEM:BA, 2004 and CARA, 1983.
- Invasive plant species must be managed in accordance with the guidelines of the EMPr throughout the operation phase of the project.
- Management must take responsibility to control declared invader or exotic species on the rehabilitated areas. The following control methods can be used:
  - "The plants can be uprooted, felled or cut off and can be destroyed completely."
  - "The plants can be treated with an herbicide that is registered for use in connection therewith and in accordance with the directions for the use of such an herbicide."

#### **Erosion & Stormwater monitoring:**

- Divert runoff water with trenches and contour structures to prevent erosion of the work areas.
- Adequate drainage and erosion protection in the form of cut-off berms or trenches will be provided where necessary.
- Grade or landscape eroded areas.

### **Air Quality**

- Control the liberation of dust into the surrounding environment by the use of; inter alia, straw, water spraying and/or environmentally friendly dust-allaying agents that contains no PCB's (e.g., DAS products).
- Ensure continuous assessment of all dust suppression equipment to confirm its effectiveness in addressing dust suppression.

- Limit speed on the haul roads to 40 km/h to prevent the generation of excess dust.
- Minimise areas devoid of vegetation.
- Flatten and cover loads to prevent spillage and windblown dust during transportation.
- Take weather conditions into consideration upon commencement of daily operations. Limit operations during very windy periods to reduce airborne dust and resulting impacts.
- Ensure dust generating activities comply with the National Dust Control Regulations, GN No R827 promulgated in terms of NEM:AQA, 2004 and ASTM D1739 (SANS 1137:2012).
- Implement best practice measures during the transporting of material from site to minimize potential dust impacts.

### **Monitoring of Roads**

- Divert storm water around the access road to prevent erosion.
- Restrict vehicular movement to the existing access road to prevent crisscrossing of tracks through undisturbed areas.
- Repair rutting and erosion of the access road caused as a direct result of the activities.
- Prevent the overloading of the truck by installing a weighing device and file proof of load weights for auditing purposes.
- Speed on the access road must be limited to 40 km/h for operational/decommissioning vehicles.

#### **Noise Ambiance**

- All operational/decommissioning related vehicles must be equipped with silencers and maintained in a road worthy condition in terms of the National Road Traffic Act, 1996 (Act No 93 of 1996).
- Best practice measures shall be implemented in order to minimize potential noise impacts.
- The Applicant must ensure that employees, and staff conduct themselves in an acceptable manner while on site.
- No loud music may be allowed on site.

#### Waste monitoring

- Should any emergency vehicle repairs be done all spills must be disposed of in a 200 litre closed container/bin found inside the emergency service area. If emergency repairs are needed on equipment, drip trays must be present.
- The Applicant must have at least one spill kit available on site, and at least one employee must be trained in the
- Any effluents containing oil, grease or other industrial substances must be collected in a suitable receptacle and

removed from the site, either for resale or for appropriate disposal at a recognized facility.

- Hazardous waste must be contained in a 200 litre closed container/bin to removed by a registered hazardous waste handling contractor to a suitable registered landfill site.
- Should any spillage occur, the contaminated soil must, within the first hour of occurrence, be collected in a suitable receptacle and removed to the hazardous waste storage area where it must be incorporated into the existing waste handling system. Proof of safe disposal must be filed.
- All chemicals must be stored according to the storage instructions stipulated on the safety data sheet or at least within a bunded area, on an impermeable surface, that is access controlled.
- Drip trays must be used under all stationary machinery. The Applicant must ensure the drip trays are sealed and properly managed at all times.
- Suitable covered receptacles must be available at all times and conveniently placed for the disposal of waste.
- Non-biodegradable refuse such as glass bottles, plastic bags, metal scrap, etc., must be stored in a container with a closable lid at a collecting point to be collected at least once a month and disposed of at a recognized landfill site. Specific precautions must be taken to prevent refuse from being dumped on or in the vicinity of the layer facility. Proof of disposal must be available for auditing purposes.
- Biodegradable refuse must be handled as indicated above.
- Re-use or recycling of waste products must be encouraged on site.
- Employees must make use of the ablution facility at the site.

#### Monitoring of health and safety aspects

- Workers must have access to the correct personal protective equipment (PPE) as required by law.
- All operations must comply with the OHSAS, 1993 (as amended).

### Monitoring and audits of overall site compliance aspects

- Site Manager to ensure day-to-day compliance with the guidelines as stipulated in the EMPR.
- Compliance to be monitored by the independent Environmental Control Officer during the annual environmental audit.
- The holder of an environmental authorisation (EA) should submit an environmental audit report (EAR) to the relevant competent authority at intervals as indicated in the EA.

# 9. THE NEEDS AND DESIREBILITY OF THE PROPOSED DEVELOPMENT (as per notice 792 of 2012, or the updated version of this guideline)

#### 1. SECURING ECOLOGICAL SUSTAINABLE DEVELOPMENT AND USE OF NATURAL RESOURCES

now will this development impact on the ecological integrity of the area:				
Question	Response	Level of Desirability		
How were ecological integrity considerations taken into account?  How will this development disturb or enhance ecosystems and/or result in the loss or protection of biological diversity?	According to Mucina and Rutherford, 2006 the area is classified as Carletonville Dolomite Grassland (Gh 15). The natural vegetation of the surrounding area is a transitional type between typical grassland of the high inland plateau and the bushveld of the lower inland plateau. The following grass species dominate the area:  Trachypogon spicatus Giant Spear Grass  Diheteropogon amplectens Broad-leaf Bluestern  Schizachyrium sanguineum Red Autumn Grass  Tristichya leucothrix Hairy Trident Grass  Panicum natalense Natal Panicum  Digitaria tricholaenoides Purple Finger Grass  Various forbs and succulents are also found in the area, with woody vegetation occurring as sheltered islands within the grassland.  According to the Biodiversity Assessment conducted by MORA Ecological Services (Pty) Ltd (Appendix G1), the study site has been severely disturbed due to previous mining activities. Very few patches of natural vegetation remain within the property boundaries. The site shows low sensitivity, and no species of conservation concern were observed. However, disturbance should be limited strictly to the specified activities associated with the stockpiling. The client should appoint an ecologist to compile an Alien Management Plan and it should be implemented during operation of the site.	Desirable		

Question	Response	Level of Desirability
	From the survey conducted, there are no evident fatal flaws that would prevent this development from being authorised, nor being conducted in a sustainable manner	
How will this development pollute and/or degrade the biophysical environment?	Due to the small nature of the project and the area being previously disturb, the proposed activities will have relatively little impact on the vegetation and fauna around it provided that the mitigation measures are adhered to. Therefore, should the applicant adhere to the mitigation measures proposed in this report it is believed that the impact on the biophysical environment is of acceptable significance.	Desirable
What waste will be generated by this development?	The general waste to be generated at the site will mainly consist of paper, plastic, tin, and/or glass from the office area. All general waste will be contained in sealable refuse bins that will be placed at the office area until it is transported to a recognised general waste landfill site. A recognized contractor will service the chemical toilets and be responsible for the removal of the sewerage to a registered sewerage handling facility.	Highly Desirable
	As mentioned earlier, hazardous waste may result from accidental spillages/breakdowns. Such contaminated areas will immediately (within two hours of occurrence) be cleaned and the contaminated soil will be contained in a designated hazardous waste container until it is removed from site by a registered hazardous waste handling contractor to an approved facility. No waste will be disposed of, buried, burned or treated on the site.	
How will this development disturb or enhance landscapes and/or sites that constitute the nation's cultural heritage?	The natural topography of the proposed area comprises of slightly undulating plains dissected by prominent rocky chert ridges. The vegetation consists of species-rich grasslands forming a complex mosaic pattern dominated by many species. The elevation loss over the entire proposed footprint to be 1444m over 820 meters.	Desirable
	Due to the disturbed nature of the site no sites of archaeological or cultural importance were identified during the site inspection. Consultation with the interested and affected parties also did not identify any potential area of concern. As the proposed activity will entail the stockpiling of material, the activity is not anticipated to have a negative impact on any archaeological or cultural aspects. The war graves	

Question	Response	Level of Desirability
	found in the vicinity of Alaric road is more than a kilometre away and will not be affected by the proposed activity.	
How will this development use and/or impact on non-renewable natural resources?	The nature of the activity will result in a demand increase of the stockpile material, which will result in the use of existing stockpiled material without having to open a new mine and disturb natural areas. This will increase the availability of the product to various clients in the Road and Infrastructure industries thereby generating income and directly contributing to the economy of the area.	Desirable
How will this development use and/or impact on renewable natural resources and the ecosystem of which they are part?	It is proposed that approximately 30 000 litres of water will be needed per day during the dry months to manage dust emissions from the proposed operation. As mentioned earlier, the applicant will strive to manage dust generation through alternative suppression methods to restrict water use to the absolute minimum. Presently, it is proposed that water will be bought and transported to site. The applicant will be encouraged to consider the use of non-potable water for the activities. The use of solar power should also be considered as an alternative power source to the offices and/or workshops.	Desirable
How were a risk-averse and cautious approach applied in terms of ecological impacts?	If the proposed mitigation measures, as proposed in this document, is implemented, it is believed that ecological impacts should be fully mitigated.	Desirable
How will the ecological impacts resulting from this development impact on people's environmental right?	Should the activities be approved the potential visual-, dust-, and noise impacts associated with the proposed activity will be of low-medium significance. If the proposed mitigation measures, as proposed in this document, is implemented, it is believed that no environmental rights of the surrounding residents/public will be affected by the ecological impacts associated with the proposed activity.	Highly Desirable
Describe the linkages and dependencies between human wellbeing, livelihoods and ecosystem services applicable to the area in question and how the development's ecological impacts will result in socio-	If the proposed mitigation measures, as proposed in this document, is implemented, it is believed that the activities will not affect the physical, psychological, cultural or social needs of the community in a negative manner nor will it impact negatively on the socio-economic status of the area.	Desirable

# 1. SECURING ECOLOGICAL SUSTAINABLE DEVELOPMENT AND USE OF NATURAL RESOURCES How will this development impact on the ecological integrity of the area? Question Response Level of Desirability economic impacts. Based on all of the above, how will this development positively or negatively impact on ecological integrity objectives/targets/considerations of the area? Considering the need to secure ecological integrity and a healthy biophysical environment, describe how the alternatives identified, resulted in the selection of the "best practicable environmental option" in terms of ecological considerations 2. PROMOTING JUSTIFIABLE ECONOMIC AND SOCIAL DEVELOPMENT What is the socio-economic context of the area? Question Response Level of Desirability Highly Desirable What is the socio-economic context of the area? Please refer to Section B (9) - Socio-economic Environment. Considering the socio-economic context, what will the Should this application be approved, the applicant will be able to, socio-economic impacts be of the development, and

Question	Response	Level of Desirability
specifically also on the socio-economic objectives of the area?	<ul> <li>Provide employment opportunities.</li> <li>The local community/businesses will benefit from the availability of the commercial product in the Road and Infrastructure industries.</li> <li>It will also diversify the income of the property as well as potential employees and clients</li> </ul>	
How will this development address the specific physical, psychological, developmental, cultural and social needs and interests of the relevant communities?	If the proposed mitigation measures, as proposed in this document, is implemented, it is believed that the proposed activities will not affect the physical, psychological, cultural or social needs of the community in a negative manner nor will it impact negatively on the socio-economic status of the area.	Highly Desirable
Will the development result in equitable impact distribution, in the short- and long-term?	The activities propose to operate in a socially and economically sustainable manner during both the short- and long term.	Highly Desirable
In terms of location, describe how the placement of the proposed development will contribute to the area.	As mentioned above the proposed area is over a disturbed area previously used for mining purposes. This was deemed the only viable site alternative for the applicant due to it being an existing stockpile area.	Highly Desirable
How were a risk-averse and cautious approach applied in terms of socio-economic impacts?	No negative socio-economic impacts could, at this stage, be identified that cannot be managed through the implementation of mitigation measures.	Highly Desirable
How will the socio-economic impacts resulting from this development impact on people's environmental	The activity may have an impact on the visual characteristics of the surrounding environment and may potentially affect air quality and possibly the noise ambiance of the study area. However, should the activity be approved the potential visual-, dust-, and noise impacts	Highly Desirable

Question	Response	Level of Desirability
right?	associated with the proposed activity will be of low significance. If the proposed mitigation measures, as proposed in this document, is implemented, it is believed that no environmental rights of the surrounding residents/public will be affected by the socio-economic impacts associated with the proposed activity	
Considering the linkages and dependencies between human wellbeing, livelihoods and ecosystem services, describe the linkages and dependencies applicable to the area in question and how the development's socioeconomic impacts will result in ecological impacts?	As mentioned above should the proposed activity be approved the potential visual-, dust-, and noise impacts associated with the proposed activity will be of low significance. If the proposed mitigation measures, as proposed in this document, is implemented, it is believed that no environmental rights of the surrounding residents/public will be affected by the socio-economic impacts associated with the proposed activity.	Highly Desirable
What measures were taken to pursue the selection of the "best practicable environmental option" in terms of socio-economic considerations?	Please refer to section B (2) - Impacts that may result from the construction and operational Phase	Highly Desirable
What measures were taken to pursue environmental justice so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons?		
What measures were taken to pursue equitable access to environmental resources, benefits and services to meet basic human needs and ensure	The site will (if approved) operate in accordance with, amongst others, the following:  Financial Provision Regulations, 2015 – to ensure compliance in terms of rehabilitation;  NEM:AQA, 2004 – to ensure air quality related compliance;	Highly Desirable

Question	Response	Level of Desirability
human wellbeing, and what special measures were taken to ensure access thereto by categories of persons disadvantaged by unfair discrimination?	NEM:BA, 2004 – to ensure biodiversity related compliance;  NEM:WA, 2008 – to ensure waste related compliance;  NEMA, 1998 (as amended) – to ensure environmental related compliance.	
What measures were taken to ensure that the responsibility for the environmental health and safety consequences of the development has been addressed throughout the development's life cycle?		
Considering the interests, needs and values of all the interested and affected parties, describe how the development will allow for opportunities for all the segments of the community that is consistent with the priority needs of the local area.	As mentioned earlier, should this application be approved, the applicant will be able to,  Provide employment opportunities.  The local community/businesses will benefit from diversification of resources which will result in competitive product costs.  It will also diversify the income of the property as well as potential employees and clients.	Highly Desirable
What measures have been taken to ensure that current and/or future workers will be informed of work that potentially might be harmful to human health or the environment or of dangers associated with the work, and what measures have been taken to ensure that the right of workers to refuse such work will be	The operation of the stockpile site will be in accordance with the specifications of the relevant acts. Site management will have daily discussions with the operators as well as contractors regarding the work to be performed and the environment in which the work will take place. Grievances/concerns can be lodged during the daily site meetings.	Highly Desirable

Question	Response	Level of Desirability
respected and protected.		
Describe how the development will impact on job creation in terms of, amongst other aspects?	As mentioned earlier, should this application be approved, the applicant will be able to,  Provide employment opportunities.	Highly Desirable
	The local community/businesses will benefit from the availability of the commercial product in the Road and Infrastructure industries.	
	It will also diversify the income of the property as well as potential employees and clients.	
What measures were taken to ensure that the environment will be held in public trust for the people, that the beneficial use of environmental resources will serve the public interest, and that the environment will be protected as the people's common heritage.	Should this application be approved the activities will operate under a valid Environmental Authorization issued by the GDARD, compliance of the site with the approval conditions can be reported on as per the departmental specifications and also be managed in accordance with all the environmental related legislations.	Highly Desirable
Are the mitigation measures proposed realistic and what long-term environmental legacy and managed burden will be left.	It is believed that the mitigation measures proposed in this document is realistic and can be implemented (when needed) by the proposed activities. If the proposed mitigation measures, as proposed in this document, is implemented, the residual impact on the environment is of low significance.	Highly Desirable
What measures were taken to ensure that the costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing,	This site has previously been disturbed and no new area will be opened. If the proposed mitigation measures, as proposed in this document, is implemented, it is believed that the activities will not cause adverse health effects and environmental damage should this application be approved, seeing that there are no other rated activities in the vicinity. The activities will operate under a valid Environmental Authorization	Highly Desirable

Question	Response	Level of Desirability
controlling or minimising further pollution	issued by the GDARD, compliance of the site with the approval conditions can be reported on as per the departmental specifications and	
environmental damage or adverse health effects will	also be managed in accordance with all the environmental related legislations.	
be paid for by those responsible for harming the		
environment.		
	The area is a site previously used for mining purposes; therefore the proposed area has already been disturbed. Thus, the applicant will not	
Considering the need to secure ecological integrity and	explore any other site alternatives or disturb any other area.	Highly Desirable
a healthy bio-physical environment, describe how the		
alternatives identified, resulted in the selection of the		
best practicable environmental option in terms of		
socio-economic considerations		
Describe the positive and negative cumulative socio-	If the proposed mitigation measures, as proposed in this document, is implemented, it is believed that the activities will not cause a	Highly Desirable
economic impacts bearing in mind the size, scale,	cumulative socio-economic impact should this application be approved, seeing that there are no other rated activities in the vicinity.	0 /
scope and nature of the project in relation to its		
location and other planned developments in the area.		

### **10.** THE PERIOD FOR WHICH THE ENVIRONMENTAL AUTHORISATION IS REQUIRED (CONSIDER WHEN THE ACITIVTY IS EXPECTED TO BE CONCLUDED)

20 years	j
11. ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPr) (must include post const	ruction
monitoring requirements and when these will be concluded.)	
If the EAP answers "Yes" to Point 7 above then an EMP is to be attached to this report as an Appendix	

EMPr attached

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### SECTION F: APPENDIXES

The following appendixes must be attached as appropriate (this list is inclusive, but not exhaustive):

It is required that if more than one item is enclosed that a table of contents is included in the appendix

Appendix A: Site plan(s) – (must include a scaled layout plan of the proposed activities overlain on the site sensitivities indicating areas to be avoided including buffers) – **Attached as Appendix A** 

Appendix B: Photographs - Attached as Appendix B

Appendix C: Facility illustration(s) N/A Layout plan attached as Appendix C

Appendix D: Route position information N/A

Appendix E: Public participation information - Attached as Appendix D

Appendix F: Water use license(s) authorisation, SAHRA information, service letters from municipalities, water supply information. **N/A** 

(As mentioned earlier, the applicant will strive to manage water use to the absolute minimum. Presently, it is proposed that water will be bought and transported to site. The contractor will be encouraged to consider the use of non-potable water for the activities. The use of solar power should also be considered as an alternative power source to the offices and/or workshops.)

Appendix G: Specialist reports Attached as Appendix G1 - Terrestrial Biodiversity Impact Assessment, Appendix G2 - Stormwater Management Plan and Appendix G3 - Geologist Motivation

Appendix H: EMPr - Attached as Appendix F

Appendix I: Other information Appendix G - CV and Experience Record of EAP

#### **CHECKLIST**

To ensure that all information that the Department needs to be able to process this application, please check that:

- √Where requested, supporting documentation has been attached;
- ✓All relevant sections of the form have been completed.

## APPENDIX A SITE PLAN



## APPENDIX B SITE PHOTOGRAPHS



### APPENDIX C LAYOUT MAP



## APPENDIX D1 PROOF OF SITE NOTICE



# APPENDIX D2 WRITTEN NOTICES ISSUED AS REQUIRED IN TERMS OF THE REGULATIONS



## APPENDIX D3 PROOF OF NEWSPAPER ADVERTISEMENTS



# APPENDIX D4 COMMUNICATIONS TO AND FROM INTERESTED AND AFFECTED PARTIES



## APPENDIX D5 COMMENTS AND RESPONSE REPORT



### APPENDIX D6 COPY OF THE REGISTER OF I&APS



### **APPENDIX E**

(As mentioned earlier, the applicant will strive to manage water use to the absolute minimum. Presently, it is proposed that water will be bought and transported to site. The contractor will be encouraged to consider the use of non-potable water for the activities. The use of solar power should also be considered as an alternative power source to the offices and/or workshops.

The general waste to be generated at the site will mainly consist of paper, plastic, tin, and/or glass from the office area. All general waste will be contained in sealable refuse bins that will be placed at the office area until it is transported to a recognised general waste landfill site.

A recognized contractor will service the chemical toilets and be responsible for the removal of the sewerage to a registered sewerage handling facility.

Hazardous waste may result from accidental spillages/breakdowns. Such contaminated areas will immediately (within two hours of occurrence) be cleaned and the contaminated soil will be contained in a designated hazardous waste container until it is removed from site by a registered hazardous waste handling contractor to an approved facility. No waste will be disposed of, buried, burned or treated on the site.)



# APPENDIX F ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT



# APPENDIX G1 TERRESTRIAL BIODIVERSITY IMPACT ASSESSMENT



### APPENDIX G2 STORMWATER MANAGEMENT PLAN



## APPENDIX G3 GEOLOGIST MOTIVATION



# APPENDIX H CV AND EXPERIENCE RECORD OF EAP

