

mineral resources

Mineral Resources REPUBLIC OF SOUTH AFRICA Private Bag X6076, Port Elizabeth, 6000 Tel: (041) 396 3934 Fax: 0865768004 Cnr.Diaz and Mount Roads Mount Croix Port Elizabeth, 6001

Enquiries: D. A. Watkins E-mail: deidre.watkins@dme.gov.za Reference: Date: EC30/5/1/3/3/2/1/0448EM 13 July 2010

South African Heritage Resources Agency P.O. Box 758 GRAHAMSTOWN 6140

aselD: 2167

ATTENTION: MR. T. LUNGILE

Sir

CONSULTATION IN TERMS OF SECTION 40 OF THE MPRDA OF 2002: ENVIRONMENTAL MANAGEMENT PLAN (EMP); BORROW PIT - SIPHUSIPHU ACCESS ROAD, DIVISION OF PORT ST. JOHNS

- 1. Attached herewith, a copy of an EMP received from Port St. Johns Local Municipality for your comments.
- 2. Any written comments or requirements your department may have in this regard can be forwarded to this office no later than <u>7 September 2010</u>. Failure to do so, will lead to the assumption that your department has <u>no objection(s) or comments</u> with regard to the said documents. Comments may be submitted at your earliest convenience e.g. 30 days from the date hereof in order to reduce the turnaround time for the application process.
- 3. Consultation in this regard has also been initiated with other relevant State Departments.
- 4. Please use the reference number (EC) 30/5/1/3/3/2/1(0448) EM in all future correspondence.
- 5. Your co-operation is appreciated.

Sincerely,

REGIONAL MANAGER

EASTERN CAPE





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FINAL

BORROW PIT

ENVIRONMENTAL MANAGEMENT PLAN AND REHABILITATION PLAN

SIPHUSIPHU ACCESS ROAD

Prepared by:



P O Box 483 Gonubie 5256 +27 (0) 43 740 0477 +27 (0)73 416 5774 +27 (0)86 655 9202 nolubabalo.ntunzi@fluxsa.co.za

On behalf of

Port St Johns Local Municipality

P O BOX 2 Port St. Johns 5120 +27 (0)47 564 1208 +27 (0)72 390 0755 +27 (0)47 491 0712 thabokwape@yahoo.com **Prepared For:**

Department of Minerals and Energy Private Bag 6076 Port Elizabeth 6000

Corner Mount Road and Diaz Road Mount Croix Port Elizabeth 6000

June 2010



Abbreviations

ECO Environmental Control Officer

DEAET Eastern Cape Department Economic Affairs Environmental and Tourism

EMP Environmental Management Programme



Introduction

Flux Development Scientists has been appointed by Usiba Lwe Afrika Consulting Engineers on behalf of Port St Johns Local Municipality to conduct environmental impact studies (Basic Assessment) for the construction of an access road between in the Siphusiphu Administrative Area in Port St Johns. The environmental impact assessment has commenced and the Basic Assessment Report has been submitted to Department Economic Affairs Environmental and Tourism (DEAET, Mthatha Offices). Part of the terms of reference of the appointment included an application for a mining permit for two borrow pits for extraction of road material.

Description of the environment

i. Site Location

The road site is located north west of Port St John's, Eastern Cape and the GPS positions of the borrow pits are as follows:

Burrow Pit 1: 31° 28′ 56.5″ S; 29° 18′ 31.00″E Borrow Pit 2: 31° 27′ 26.09″ S; 29° 19′ 14.35″E

The two borrow pits are shown in Figure 1.

ii. Topography

In general the site is hilly, becoming steep in places.





Figure 1. Borrow Pit Locality Map



Assessment of potential impacts

An evaluation and prediction of the likely impacts of the proposed development on the receiving environment has been performed. This report focuses on environmental impacts that may result from development activities that will affect the flora and fauna within the sites and surrounds.

1.1 General Impact Rating Scale for Specialists/ Baseline data

1.1.1 Methodology for rating significance of impacts:

The following section outlines the assessment methodology and legal context for specialist studies. (Section 3: Assessment of Impacts, in DEAT Guideline 5, June 2006). The identification of potential impacts should include impacts that may occur during the construction and operational phases of the activity. The assessment of impacts is to include direct, indirect as well as cumulative impacts. In order to identify potential impacts (both positive and negative) it is important that the nature of the proposed activity is well understood so that the impacts associated with the activity can be understood. The process of identification and assessment of impacts will include:

- Determine the current environmental conditions in sufficient detail so that there is a baseline against which impacts can be identified and measured.
- Determine future changes to the environment that will occur if the activity does not proceed.
- · An understanding of the activity in sufficient detail to understand its consequences; and

• The identification of significant impacts which are likely to occur if the activity is undertaken As per Guideline Document 5: Assessment of Alternatives and Impacts the following methodology is to be applied to the predication and assessment of impacts. Potential impacts should be rated in terms of the direct, indirect and cumulative.

 "Direct impacts are impacts that are caused directly by the activity and generally occur at the same time and at the place of the activity. These impacts are usually associated with the construction, operation or maintenance of an activity and are generally obvious and quantifiable.



- Indirect impacts of an activity are indirect or induced changes that may occur as a result of the activity. These types of impacts include all the potential impacts that do not manifest immediately when the activity is undertaken or which occur at a different place as a result of the activity.
- Cumulative impacts are impacts that result from the incremental impact of the proposed activity on a common resource when added to the impacts of other past, present or reasonably foreseeable future activities. Cumulative impacts can occur from the collective impacts of individual minor actions over a period of time and can include both direct and indirect impacts." DEAT (2006).
- Spatial extent The size of the area that will be affected by the impact
 - Site specific
 - Local (<2 km from site)
 - Regional (within 30 km of site)
 - o National
- Intensity The anticipated severity of the impact
 - High (severe alteration of natural systems, patterns or processes)
 - Medium (notable alteration of natural systems, patterns or processes)
 - Low (negligible alteration of natural systems, patterns or processes)
- Duration The timeframe during which the impact will be experienced
 - o Temporary (less than 1 year)
 - Short term (1 to 6 years)
 - Medium term (6 to 15 years)
 - Long term (the impact will cease after the operational life of the activity)
 - Permanent (mitigation will not occur in such a way or in such a time span that the impact can be considered transient)

Using the criteria above, the impacts will further be assessed in terms of the following:

- Probability –The probability of the impact occurring
 - Improbable (little or no chance of occurring)
 - Probable (<50% chance of occurring)



- Highly probable (50 90% chance of occurring)
- Definite (>90% chance of occurring)
- Significance Will the impact cause a notable alteration of the environment?
 - Low to very low (the impact may result in minor alterations of the environment and can be easily avoided by implementing appropriate mitigation measures, and will not have an influence on decision-making)
 - Medium (the impact will result in moderate alteration of the environment and can be reduced or avoided by implementing the appropriate mitigation measures, and will only have an influence on the decision-making if not mitigated).
 - High (the impacts will result in major alteration to the environment even with the implementation of the appropriate mitigation measures and will have an influence on decision-making)
- Status Whether the impact on the overall environment will be positive, negative or neutral
 - "+" (positive environment overall will benefit from the impact).
 - o "-"(negative environment overall will be adversely affected by the impact).
 - o "o" (neutral environment overall will not be affected).
- Confidence The degree of confidence in predictions based on available information and specialist knowledge
 - o Low
 - o Medium
 - o High
- Management Actions and Monitoring of the Impacts (EMP)
 - Where negative impacts are identified, mitigatory measures will be identified to avoid or reduce negative impacts. Where no mitigatory measures are possible this will be stated.
 - Where positive impacts are identified, mitigatory measures will be identified to potentially enhance positive impacts.
 - Quantifiable standards for measuring and monitoring mitigatory measures and enhancements will be set. This will include a programme for monitoring and reviewing the recommendations to ensure their ongoing effectiveness.

Other aspects to be taken into consideration in the assessment of impact significance are:



- Impacts will be described both before and after the proposed mitigation and management measures have been implemented.
- Impacts will be evaluated for the construction, operation and termination phases of the development
- The impact evaluation will, where possible, take into consideration the cumulative effects associated with this and other facilities/projects which are either developed or in the process of being developed in the local area.
- The impact assessment will attempt to quantify the magnitude of potential impacts (direct and cumulative effects) and outline the rationale used. Where appropriate, national standards are to be used as a measure of the level of impact.

1.2 Identified Impacts

Seven (7) direct biophysical environmental impacts have been identified, as follows:

A. Direct Impacts

- 1. Loss of habitat for species of special concern in Transkei Coastal Belt ;
- 2. Loss of Transkei Coastal Belt Species of Special Concern habitat;
- 3. Loss of habitat for species of special concern in Scarp Forest;
- 4. Increased risk of alien invasion;
- 5. Increased incidence of erosion;

B. Indirect Impacts

- 1. Ease of access to public transport facilities for the locals.
- 2. Employment opportunities for the locals during construction.



Impact Assessment

A. Direct Impacts

1. Loss of habitat for species of special concern in Transkei Coastal Belt

Nature of the Impact	Some removal and trimming of vegetation is likely to occur and may result in some impact to ecological processes.	
Extent	Site specific	
Duration	Permanent	
Intensity	Low, roads will be narrow and clearing minimal	
Probability	bability Definite (>90% chance of occurring)	
Status of Impact -ve negative		
Degree of Confidence	High	
Significance (no mitigation)	Low	
Mitigation	Wherever possible, trees should be avoided and understorey trimming minimised so that overhead canopy is retained	
Significance (with mitigation)	Low	

2. Loss of habitat for species of special concern in Transkei Coastal Belt

Nature of the Impact	Some removal and trimming of vegetation is likely to occur and may result in some impact to ecological processes.	
Extent Site specific		
Duration	Permanent	
Intensity	Low, roads will be narrow and clearing minimal	
Probability	Definite (>90% chance of occurring)	
Status of Impact -ve negative		
Degree of Confidence	Confidence High	
Significance (no mitigation)	Low	
Mitigation	Wherever possible, trees should be avoided and understorey trimming minimised so that overhead canopy is retained	
Significance (with mitigation)	Low	

3. Increased risk of alien invasion

Nature of the Impact	Construction of the borrow pits may open up areas for colonisation
	of alien invasive species



Extent	Site specific	
Duration	Permanent	
Intensity	Low, roads will be narrow and clearing minimal	
Probability	Definite (>90% chance of occurring)	
Status of Impact	-vet negative	
Degree of Confidence	High	
Significance (no mitigation)	Low	
Mitigation	Wherever possible, trees should be avoided and understorey trimming minimised so that overhead canopy is retained	
Significance (with mitigation)	Low	

4. Increased incidence of erosion

Nature of the Impact	Removal of multi layers of soil	
Extent	Site specific	
Duration	Temporal (with mitigation)	
Intensity	Moderate, some initial clearing may occur of key species	
Probability	Possible	
Status of Impact	t -ve negative	
Degree of Confidence	Moderate	
Significance (no mitigation)	Low	
Mitigation	All exposed areas must be rehabilitated immediately after use	
Significance (with mitigation)	Low	

B. Indirect Impacts

1 Ease of access to public transport for the locals

Nature of the Impact	Improvement of the current road	
Extent	Local	
Duration	Permanent (no mitigation required)	
Intensity	High	
Probability	Highly probable	
Status of Impact	Positive	
Degree of Confidence	Medium	
Significance (no mitigation)	Medium	
Mitigation	No mitigation required	
Significance (with mitigation)		



2 Employment

Nature of the Impact	Upliftment of community livelihoods	
Extent	Local	
Duration	Permanent (no mitigation required)	
Intensity	High	
Probability	Highly probable	
Status of Impact	Positive	
Degree of Confidence	High	
Significance (no mitigation)	Medium	
Mitigation	No mitigation required	
Significance (with mitigation)	-	

Summary of the significance of potential impacts and proposed mitigation

Table1: Recommended Impact Mitigation procedures.

Im	pact Description	Proposed Mitigation actions	
Ve	Vegetation and Flora		
1.	Loss of habitat for species of special concern in Transkei Coastal Belt	 Species of special concern should be avoided where reasonably possible, permits should be obtained where unavoidable 	
2.	Loss of Scarp Forest Species of Special Concern habitat	 Road to be constructed along existing old road, so clearing will be limited to re-growth 	
3.	Loss of Transkei Coastal Belt Species of Special Concern habitat	 Road to be constructed along existing old road, so clearing will be limited to re-growth 	
4.	Increased risk of alien invasion	 River crossing and clearing of thicket should be avoided 	
5.	Increased incidence of erosion	 Exposed areas must be rehabilitated immediately after use. 	
6.	Ease of access to public transport facilities for the locals.	 This is a positive impact of the development and no mitigation is required. 	
7.	Employment	• This is a positive impact of the development and no mitigation is required.	



Standard Management Programme

Environmental Specifications

a) Fauna and Flora

- The Port St John's area is predominantly comprised of Grassland covered hills (Transkei coastal belt), of varying species composition, and Coastal Scarp Forest in the valleys and in small pockets on the slopes.
- Indigenous reptiles and birds may be present, if found, they may not be damaged or harmed. Vegetation removals as part of the development requirements are excluded and are dealt with in a site specific method statement.
- All sensitive areas will be marked out properly. Demarcation procedures are explained below.
- All incidents of harm to any animal or natural vegetation (apart from the agreed areas) must be reported to the ECO who will keep a register of these incidents.

b) Services

- Care and due cognisance must be taken of existing services and service construction methods and restrictions.
- A base plan indicating the existing services and all no-go areas must be supplied by the client through the engineers and discussed by the engineer to all contractors before any work activities may commence.

c) Appropriate use of machinery

• The contractor shall at all times carefully consider what machinery is appropriate to the task while minimising the extent of environmental damage.



d) Demarcating and fencing

- Sensitive areas In the event that sensitive features are threatened by construction activities, the temporary fencing off of these areas (for individual areas such as trees or rocks) or the construction area (when working in a mainly natural environment) is recommended. A two-strand barbed wire fence of approximately 1m high is considered adequate.
- All fencing and fence placement / positioning must be approved by the ECO on site.
- Where the construction area is fenced, all activities including stockpiling must occur within this fenced area. The contractor shall be fined and must pay for reinstatement or rehabilitation of damaged areas and features.
- Deep excavations and trenching taking place must conform to the following:
- Proper demarcation must be in place prior to construction commencing and all excavations must be screened off for the duration of construction.
- Proper signage must warn people of the risk involved.
- All necessary precautions must be taken during excavations of bedrock in order to prevent contamination of the ground water.
- Contractors must take cognisance of all demarcated areas on site: Work areas (including stockpiling, lay-down and waste areas) and access routes will be clearly demarcated to minimise environmental impact. Demarcation can take the form of colour coded pegs at least 1 m high. Danger tape may also be used for this purpose. All pegs and tape must be maintained.

e) Anti- erosion measures

- The Contractor shall take appropriate and active measures to prevent erosion resulting from
 his own works, operations and activities as well as stormwater control measures to the
 satisfaction of the ECO / Engineer. Restoration costs are for the contractor's account,
 should these measures not be reasonably implemented. Aspects normally covered in
 construction contracts in terms of "protection of works" are standard and are not to be
 billed or confused with any details covered under environmental requirements.
- During construction the Contractor shall protect areas susceptible to erosion by installing all the necessary temporary and permanent drainage works as soon as possible. Other measures as may be necessary will be taken to prevent the surface water from being



concentrated within the channel and from scouring slopes, banks or other areas. All such measures will be discussed with and approved by the ECO / Engineer

Measures can include cut off trenches, straw stabilising, brush packing etc.

f) Fuel and Service areas

- Fuels and flammable materials are to be stored in suitably equipped storage areas. These
 areas shall comply with general fire safety requirements. Impervious materials are to be
 used in these storage areas to prevent contamination of the ground in the event of spillages
 or leaks. Quantities of fuels and hazardous materials stored on site should be appropriate to
 the requirement for these substances on site.
- All vehicles, equipment, fuel and petroleum services and tanks must be maintained in a good condition that prevents leakage and possible contamination of soil or water supplies. The following recommendations should be implemented:
 - Refuelling areas should be bunded and lined to prevent spilled fuels and oils from contaminating the area. It is suggested that as a minimum, sandbags surround the bulk fuel supply tank, the floor of the area is to be lined with plastic and a layer of sand of approximately 50mm is placed on top of the plastic.
 - The park and service area should be treated with a suitable hydrocarbon absorption or remediation product. Properly maintained absorbent spill mop-up kits need to be on hand - Drizzit and products from Enretech should be investigated for these purposes.
- All servicing areas must have a drip tray present to prevent accidental spillage of oils and fuels.
- A suitable leak proof container for the storage of oiled equipment (filters, drip tray contents and oil changes etc.) must be established. Fuels and oils must be safely located out of harm's way from the elements and safety and fire prevention must be strictly adhered to. No fuel may be stored within the 1:50 year flood line level. No fuel/oil containers may be left unattended within drainage areas.
- All spills and remedial action are to be recorded in the ECO diary.
- The condition of the bundwalls and drip trays should be checked periodically for compliance



g) Concrete works

- Wherever concrete works are necessary, even of a limited scale, preventative measures needs to be taken to prevent pollution. Cement powder has a high alkalinity pH rating, which can contaminate and affect both soil and water pH dramatically. A shift in pH can have serious consequences on the functioning of soil and water organisms and plants. The following recommendations must be implemented to minimise impact:
 - Cement contaminated water may not enter a natural or man-made water system (e.g. trench or storm water system).
 - Preventative measures include:
 - If possible/appropriate ready mix concrete should be used.
 - Mixing areas to be carefully placed in consultation with the Engineer / ECO.
 - Cement bags are to be stored securely out of harm's way from the elements (wind and rain). Used bags must be removed to a licensed waste management facility and *may not be burned* on site.
 - Excess or spilled concrete should be confined within the works area and then removed to a waste site.
- In case of high volumes, establishing sumps from where contaminated water can be either treated in situ or removed to an appropriate waste site may be requested by the ECO.

h) Fires

- No open fires (for cooking, warming etc.) may be allowed within the construction area. Adequate firefighting equipment according to the fire hazard during the construction period must be available on site in good working order (at least one type ABC (all purpose) 12.5 kg extinguisher).
- Welding, gas cutting or cutting of metal will only be permitted inside the working areas and then only within a designated area due to the intensity and/or frequency if deemed necessary by the ECO.



 The Contractor shall pay the costs incurred to organisations called to put out any fires started by him. The Contractor shall also pay any costs incurred to reinstate burnt areas, fences, properties etc. as deemed necessary by the Engineer.

i) Refuse

- The Contractor shall be responsible for the establishment of a refuse control system that is acceptable to the ECO.
- The Contractor shall ensure that all waste, including surplus food, food packaging and organic waste are not deposited by his employees anywhere on the site or in the surrounding area except in refuse bins provided for removal on a regular basis by the Contractor.
- For the purposes of this document refuse also includes discarded construction materials such as steel reinforcing, wooden shuttering and timbers, cement bags, piping etc.
- Refuse bins shall be weather and animal-proof and the amount of bins provided needs to be sufficient for daily volumes of waste produced. The Contractor must transport refuse collected from the working areas from site at least once a week. Refuse must be disposed of at a licensed site approved by the ECO/Engineer.

j) Toilets

- The Contractor shall provide suitable sanitary arrangements near his offices and construction sites for his staff. A minimum of one toilet shall be provided per 15 persons at each working area or as stipulated by local authority or other relevant legislation.
- Toilets shall be of a neat construction and shall be provided with doors and locks and shall be secured to prevent them blowing over.
- Sanitation provision and servicing shall be to the satisfaction of the Engineer. The Contractor shall ensure that toilets are emptied before any builders' holidays. The toilets will be for use of the construction personnel on-site only and the toilets should therefore, be lockable and should be kept locked outside of working hours to prevent public use of the facilities.



k) Dust Control

- The Contractor is to take appropriate measures to minimise the generation of dust as a
 result of construction works, to the satisfaction of the ECO. On sandy or very dusty sites,
 mulched indigenous vegetation which is to be removed from the site and is suitable can be
 used as a method of stabilisation and dust control on any cleared or exposed sections of the
 site. Alternatively, straw stabilisation or watering can be used. Seed bearing invasive
 vegetation should not be used for this purpose.
- No water should be extracted from rivers or dams for dust suppression as such activity will
 require authorisation from Department of Water Affairs and Environmental Affairs.

I) Top material Removal and Stockpiling

- Prior to construction or earthworks commencing on site, top material should be stripped from work sites and separat4ely stockpiled for later use in rehabilitating damaged areas or for landscaping purposes.
- Topsoil stockpiles not to exceed 1.5m in height.
- Compaction of topsoil stockpiles is not permitted.

m) Site Clean Up and Rehabilitation

 The Contractor must ensure that all structures, equipment, materials and facilities used or created on site for or during construction activities are removed once the project has been completed. The construction site shall be cleared, and cleaned to the satisfaction of the ECO.



Rehabilitation Plan

Rehabilitation Objective

The overall objective of the rehabilitation plan is to minimize adverse environmental impacts associated with the activities. Additional broad rehabilitation strategies / objectives include the following:

- Rehabilitating the worked-out areas to take place concurrently within prescribed framework established in the Standard Management Programme.
- All infrastructures, equipment, plant and other items used during the construction/mining period will be removed from the site.
- Waste material of any description, including scrap, rubble and tyres, will be removed entirely from the mining area and disposed of at a recognised landfill facility. It will not be permitted to be buried or burned on site.
- Final rehabilitation shall be completed within a period specified by the Engineer/ECO.

Topsoil and Subsoil Replacement

Topsoil and subsoil will be stripped separately and will be stockpiled separately and only used in rehabilitation work towards the end of the operations. Stripped overburden will be backfilled into the worked out areas. Stripped topsoil will be spread over the re-profiled areas to an adequate depth to encourage plant re-growth. The vegetative cover will be stripped with the thin topsoil layer to provide organic matter to the relayed material and to ensure that the seed store contained in the topsoil is not diminished. Reseeding may be required should the stockpiles stand for too long and be considered barren from a seed bank point of view. Stockpiles should ideally be stored for no longer than a year.

The topsoil and overburden will be keyed into the re-profiled surfaces to ensure that they are not eroded or washed away. The topsoiled surface will be left fairly rough to enhance seedling establishment, reduce water run-off and increase filtration.



Revegetation

All prepared surfaces will be seeded with suitable grass species to provide an initial ground cover and stabilize the soil surface. Whilst *Chloris gayana* and *Themeda triandra* are the preferred species to use for revegetation, other species that can work in this regard include the following and can either be collected on site (using a mower or by hand) or purchased from a relevant local seed supplier:

Botanical name	Common name
Cynodon dactylon	Couch grass
Stenotaphrum secundatum	Buffalo turf grass
Themeda triandra	Rooigras
Digitaria eriantha	Finger grass
Paspalum dilatatum	Dallis grass
Setaria sphacelata	
Sporobolus africanus	an (and and a construct of a construct one construct one construction of a construction of the construction of
Sporobolus virginicus	

The overall revegetation plan will, therefore, be as follows:

- Ameliorate the aesthetic impact of the site
- Stabilise disturbed soil and rock faces
- Minimize surface erosion and consequent siltation of natural water course located on site
- Control wind-blown dust problems
- Enhance the physical properties of the soil
- Re-establish nutrient cycling
- Re-establish a stable ecological system

Every effort must be made to avoid unnecessary disturbance of the natural vegetation during quarrying operations.



Drainage and Erosion Control

To control the drainage and erosion at site the following procedures will be adopted:

- Areas where construction/mining is completed should be rehabilitated immediately.
- Borrow pit slopes will be profiled to ensure that they are not subjected to excessive erosion but capable of drainage run-off with minimum risk of scour (maximum 1:3 gradient).
- All existing mined areas will be revegetated to control erosion and sedimentation
- Existing vegetation will be retained as far as possible to minimize erosion problems.

Visual Impacts Amelioration

The overall visual impact of the proposed borrow pit will be minimised by the following mitigating measures:

- Confining the mining footprint to an area as small as possible
- Integrating the borrow pit into the existing land slope
- Re-topsoiling and vegetating all disturbed areas
- Use indigenous trees around the perimeter of the mine to mask borrow pitscars.

Monitoring and performance assessment

Monitoring and Reporting

Adequate management, maintenance and monitoring will be carried out by the applicant to ensure successful rehabilitation of the property until a closure certificate is obtained.

To minimise adverse environmental impacts associated with quarrying operations it is intended to adopt a progressive rehabilitation programme, which will entail carrying out the proposed rehabilitation procedures concurrently with quarrying activities.

Inspecting and Monitoring



- Monitoring of all the environmental management measures and components shall be carried out by the holder of the mining permit to ensure that the provisions of this programme are adhered to.
- Ongoing and regular reporting of the progress of implementation of this programme will be done. An environmental audit should be carried out by an independent consultant on before closure basis. The findings of this audit shall be reported back to the Regional Director.
- Any change to the mining process needs to be documented during the audit process and the necessary changes recorded to facilitate future mining operations and audit investigations.
- Adherence to the impacts associated with the borrow pit quarrying operations must be addressed in the annual audit.
- Inspections and monitoring shall be carried out on both the implementation of the programme and the impact on plant and animal life.
- Adherence to concerns raised by IAP's during the public participation process should receive special attention during the environmental audit and correspondence to the various IAP's should be made on an annual basis in this regard.

Compliance Reporting / Submission of Information

- Any emergency or unforeseen impact must be reported to the Regional Manager within 14 days of such event being noticed.
- An assessment of environmental impacts that were not properly addressed or were unknown when the EMP was compiled shall be carried out and added as a corrective action.



Annexure B

Borrow Pit 2 Coordinate Data





PORT ST JOHNS MUNICIPALITY Erf 257 · Main Street Port St Johns · 5120

Enquiries: O. Sopela Date: 05 July 2010 The Regional Manager Private Bag X6076 PORT ELIZABETH 6000

Re: Request for Exemption for Mining Permit Application, Port St Johns Local Municipality.

Dear Ms Biyela

The Port St Johns Local Municipality Intends to construct a 16 km access road to service the Siphusiphu/ Majola Administrative Area in Port St Johns, Eastern Cape. As part of the development, road construction material will be extracted from two borrow pits in the area. As permits are required for such activities, the Port St Johns Local Municipality would like to request an exemption from Section 27 of the Mineral and Potroloum Resources Development Act of 2002, Section 23 of the Minerals and Petroleum Resources Development Amendment Act, 2008 and provisions of Chapter 5 of the National Environmental Management Act, 1998 and other applicable legislation pertaining to permit applications regarding borrow pits.

The borrow plts are located at the following locations:

Burrow Pit 1: 31° 28' 56.05" S; 29° 18' 31.00" E

Borrow Pit 2: 31° 27' 26.09" S: 29° 19' 14.35" E

ALL CORRESPONDENCE MUST BE DIRECTED TO THE MUNICIPAL MANAGER, Z HEWU Tel: 047 564 1207/6, Fax: 047 554 1206, E-mail zhewu@psjmuniolpality.co.za

PO BOX 2 . PORT ST JOHNS . 5120 . WWW.PSJMUNICIPALITY.CO.ZA



The Basic Assessment process commenced in March 2010 and a public meeting was held at Mangcongolweni Village on the 17th March 2010. Subsequently, the Basic Assessment Report has been submitted to the Department of Economic Affairs Environment and Tourism.

Accompanying this letter is an Environmental Management Programme and coordinate data representing the circumference of each of the two borrow pits.

For further information please contact Ms Nolubabalo Ntunzi (Flux Scientist) at 043 740 0477/ 073 416 5774.

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E.

Yours Sincerely

Z. Hewu

The Municipal Manager

ALL CORRESPONDENCE MUST BE DIRECTED TO THE MUNICIPAL MANAGER, Z HEWU Tel: 047 564 1207/6, Fax; 047 564 1206, E-mail zhewu@psjmunicipality.co.za

PO BOX 2 . PORT ST JOHNS . 5120 . WWW.PSJMUNICIPALITY.CO.ZA



Closure and environmental objectives

Closure

When the holder of a mining right intends closing the mining operation, an environmental risk report shall accompany the application for closure. The requirements of such a risk report are contained in Regulation 60 of the MPRDA.

Closure Objectives

The decommissioning phase and closure of the borrow pits will involve removal of all debris and rehabilitation of areas not rehabilitated during the operational phases of the project. This will comprise the scarification of compacted areas, reshaping of areas, topsoiling and regenerating all prepared surfaces. The crusher and screening plants will be dissembled and all other infrastructural development such as haulage roads and stock pile areas will be rehabilitated.

Borrow pit closure upon completion of the operation needs to be conducted in accordance to the objectives outlined in this report. The recommendations outlined in this report regarding precision blasting of besides, topsoil replacement and re-vegetation all need to be complied with before closure can be considered.



Annexure A

Borrow Pit 1 Coordinate Data







Annexure **B**

Borrow Pit 2 Coordinate Data





