

Private Bag X 9467, Polokwane, 0700. 101 Dorp Street, Polokwane, 0699 Tel no: (015) 287 4700; Fax no: (015) 287 4729

#### **Directorate Minerals Regulations: Limpopo Region**

Enquiries: D.Tshamiswe

E-mail address: Derrick.Tshamiswe @dme.gov.za

Reference nr: LP30/5/1/1/3/3/2/534 EM

**REGISTRED MAIL** 

The Manager:
The Provision- SAHRA Limpopo
P. O. Box 137
Polokwane
0700

Attention: Mr. Donald Lithole/ Victor Netshiavha

CONSULTATION IN TERMS OF SECTION 40 OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT 2002, (ACT 28 OF 2002) FOR THE ISSUING OF A CLOSURE CERTIFICATE FOR BORROW PIT ON THE PORTION 9 OF THE FARM PELGRIMSHOOP 630 LS, SITUATED IN THE MAGISTERIAL DISTRICT OF POLOKWANE, LIMPOPO REGION.

#### APPLICANT: POLOKWANE LOCAL MUNICIPALITY

Attached herewith, please find a copy of a closure plan and environmental risk report of the above mentioned property for your comments.

It would be appreciated if you could forward any comments or requirements your Department may have in the case in hand to this office and to the applicant within 30 days as from **04 June 2009 to 04 August 2009**, failure of which will lead to the assumption that your Department has no objection(s) or comments with regard to this application and this Department will in that instance proceed with the finalisation thereof.

Consultation in this regard has also been initiated with other relevant State Departments. In an attempt to expedite the consultation process please contact Martin Rambau of this office to make arrangements for a site inspection or for any other enquiries with regard to this application.

Your co-operation will be appreciated.

THE REGIONAL MANAGER LIMPOPO REGION- POLOKWANE 04 June 2009



## i.w.terblanche and associates

105 DE MEER STREET **POLOKWANE** 0699

(015) 298 8174 Fax: (015) 298 8779

E-mail: igme@netactive.co.za

**Date:** 30-03-2009

General Manager Department of Minerals and Energy 101 Dorp Street Polokwane 0699

APPLICATION FOR CLOSURE OF BORROW PIT FOR THE MINING OF SAND: PORTION 9 OF THE FARM PELGRIMSHOOP 630 LS, POLOKWANE MUNICIPAL COUNCIL AREA, LIMPOPO PROVINCE

Your Ref: LP 30/5/1/3/3/2/534 EM refers.

Herewith please find six copies of the following documents for your further attention:

- Application for closure certificate
- Closure plan
- Performance assessment on the environmental management plan
- Environmental risk report
- Proof of notifying the registered owner of the property (Polokwane Local Municipality) about the closure of the borrow pit.

Yours sincerely,

Igmé Terblanche

**Environmental Consultant** 

Wallanche.

RECEIVED

MINERALS AND ENERGY PRIVATE BAG X9467

POLOKWANE 0700 REGIONAL MANAGER LIMPOPO REGION

SIGNATURE G. E. Mayer DATE. ON 104 109. NAME OF OFFICIAL.



## **DEPARTMENT: MINERALS AND ENERGY** REPUBLIC OF SOUTH AFRICA

## **APPLICATION FOR CLOSURE CERTIFICATE**

[in terms of section 43(3) of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002)]

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5 Reason for application
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Cancellation Rehabilitation X
7 Details of the relevant land, area or operation or offshore licence block pertaining to the application for closure.
Application for closure for mining wear for sand
on Ptn q of the farm Pelgrins hoop 630 hs
at Seshego, Polokwane Municipality are
3 Application for the transfer of environmental liabilities and responsibilities, if relevant, a separate submission must be appended
to the application.
9 The following documents must accompany the application:
A. A closure plan contemplated in regulation 62.
7. Glood o plan oo kompleto in regulation can
A final performance assessment on the environmental management programme or environmental management plan, as the case may be.
C. An application form in the form O contained in Annexure II, to transfer environmental liabilities and responsibilities to a competent person, if applicable.
D. A copy of an environmental risk report contemplated in regulation 60.
Signed at Polokwaise
on the TST day of APRILL 2009 (Month) (Year)
Mulle
SIGNATURE OF APPLICANT

## **DME REF. NO:** LP 30/5/1/3/3/2/ 534 EM

# <u>CLOSURE OF BORROW PIT FOR MINING OF SAND ON PORTION 9 OF THE FARM PELGRIMSHOOP 630 LS</u>

#### **CLOSURE PLAN**

## Environmental Control Officer (ECO): I.W. Terblanche

The Closure Plan contemplated in Regulation 62 of the Regulations promulgated in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), forms part of the Environmental Management Plan for the borrow pit for the mining of sand on the farm Ptn 9, Pelgrimshoop 630 LS.

The holder of the mining permit furnished the Department of Minerals and Energy (DME) with a R6 000 bank guarantee as financial provision for the closure and rehabilitation of the mining area.

The key objectives for mine closure are to return the area to its former state as far as is practically possible through rehabilitation of the mined area, and to leave it in a state which does not pose any safety hazard to both people and animals.

The area from which sand had been extracted, was levelled as mining progressed, as part of the rehabilitation process.

Seed bearing topsoil was spread out over the mined area after cessation of mining.

No foreign waste material was left at the rehabilitated mined area, or buried and covered with sand before rehabilitation. Tailings in the form of stone was spread out over the mined area and covered with topsoil.

The rehabilitated mined area will form part of the natural environment adjacent to the Blood River and will not be used for any specific purpose, apart from occasional grazing of livestock, in future. It must be noted that informal mining of sand by the local community is a common practice in the Seshego area and the rehabilitated area might, thus, be impacted upon in future.

A copy of the application for closure certificate, including appendices, was submitted to the Polokwane Local Municipality as the registered owner of the land, for information and possible comments. Proof of notification is attached.

The ECO is satisfied that the closure plan was sufficient for proper rehabilitation of the mined area and that no long-term management and maintenance would be required.

I. W. Terblanche

In Sellamike

30-03-2009

#### **DME REF. NO:** LP 30/5/1/3/3/2/ 534 EM

# <u>CLOSURE OF BORROW PIT FOR MINING OF SAND ON PORTION 9 OF THE FARM PRLGRIMSHOOP 630 LS</u>

## PERFORMANCE ASSESSMENT ON ENVIRONMENTAL MANAGEMENT PLAN

#### Environmental Control Officer (ECO): I.W. Terblanche

The Environmental Management Plan for the mining of sand on Portion 9 of the farm Pelgrimshoop 630 LS, used as bedding material for the development of a Bulk Water Supply Pipeline, contains guidelines, operating procedures and rehabilitation / pollution control requirements which were binding on the holder of the mining permit.

This report assesses the performance of the holder of the mining permit with regard to the environmental management plan.

## 1 GENERAL REQUIREMENTS

#### 1.1 MAPPING AND SETTING OUT

## 1.1.1 Layout Plan

A copy of the Site Layout Plan of the mining area for the mining of sand had been included as Appendix A in the Environmental Management Plan report and was available at the Site Office.

## 1.1.2 Demarcating the Mining Area

Demarcation was done by using permanent natural features in the mining area.

## 1.2 RESTRICTIONS ON MINING

No undercutting of trees was allowed.

No disposal of foreign material in the mining area was allowed.

The holder of the mining permit complied with the above restrictions.

#### 1.3 RESPONSIBILITY

The holder of the mining permit made every effort to rehabilitate the affected environment to its natural state and to the satisfaction of the ECO.

## 2. <u>INFRASTRUCTURAL REQUIREMENTS</u>

#### 2.1 TOPSOIL

The seed-bearing topsoil was stored outside the mining area and spread out during rehabilitation.

#### 2.2 ACCESS TO THE SITE

#### 2.2.1 Establishing Access Roads on the Site

Existing access roads were used. No new access roads were constructed.

#### 2.2.2 Maintenance of Access Roads

No maintenance was required.

#### 2.2.3 Dust Control on Access and Haul Roads

Limited dust control was required since the access road was partly overgrown with couch grass, thereby effectively limiting dust pollution.

#### 2.2.4 Rehabilitation of Access Roads

Existing access roads were used which did not require rehabilitation.

#### 2.3 OFFICE / CAMP SITES

## 2.3.1 Establishing Office / Camp Site

No office / camp site was established at the mining area.

## 2.3.2 Toilet Facilities, Waste Water and Refuse Disposal

No structures or facilities were erected at the mining area, which was used only when sand was required along the pipeline route. Trucks and the back-actor moved from the office / camp site located along the pipeline route to the mining area for the loading of sand and returned again to the said sites after loading.

#### 2.3.3 Rehabilitation of the Office / Camp Site

No office / camp site was established at the mining area.

## 2.4 VEHICLE MAINTENANCE YARD AND SECURED STORAGE AREA

### 2.4.1 Establishing the Vehicle Maintenance Yard and Secured Storage Areas

No vehicle maintenance yard or secured storage area was required or established at the mining area. The maintenance yard and storage area were located at another locality along the pipeline route.

## 2.4.2 Maintenance of Vehicles and Equipment

No maintenance done at the mining area.

#### 2.4.3 Waste Disposal

No waste generated at the mining area.

#### 2.4.4 Rehabilitation of Vehicle Maintenance Yard and Secured Storage Areas

No rehabilitation required at the mining area.

## 3. OPERATNG PROCEDURES IN THE MINING AREA

#### 3.1 LIMITATIONS ON MINING

The ECO is satisfied that no undercutting of trees or any other significant environmental damage occurred during mining operations.

## 3.2 MINING OPERATIONS WITHIN THE RIVERINE ENVIRONMENT

No mining operations took place within the riverine environment.

#### 3.3 EXCAVATIONS

## 3.3.1 Establishing the Excavation Areas

Seed-bearing topsoil was separated from overburden and removed to a safe area where it was stored within the boundaries of the mining area.

### 3.3.2 Rehabilitation of Excavation Areas

The ECO is satisfied that rehabilitation of the excavation area was properly done and that the holder of the mining permit did not use the excavation area as a dumping site for waste material before rehabilitation.

#### 3.4 PROCESSING AREAS AND WASTE PILES (DUMPS)

## 3.4.1 Establishing Processing Areas and Waste Piles

No processing area required.

### 3.4.2 Rehabilitation of Processing Areas

No rehabilitation required.

### 3.5 TAILINGS DAM (SLIMES DAM)

No tailings dam established.

#### 3.6 FINAL REHABILITATION

Rehabilitation was done according to DME guidelines and requirements.

### 4 MONITORING AND REPORTING

#### 4.1 INSPECTIONS AND MONITORING

The ECO inspected and monitored the mining operations during the operational phase and inspected the rehabilitation of the mining area after closure.

The ECO is satisfied with the manner in which mining operations were conducted and with the rehabilitation of the mining area.

#### 4.2 COMPLIANCE REPORTING / SUBMISSION OF INFORMATION

No emergency or unforeseen environmental impacts occurred during the operational phase of the mining area.

Environmental impacts were properly addressed during compilation of the EMP programme and no assessment of unknown impacts was required during the mining operations.

#### 5. <u>CLOSURE</u>

#### 5.1 ENVIRONMENTAL RISK REPORT

An environmental risk report contemplated in Regulation 60 of the Regulations promulgated in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), accompanies the application for closure of the mining area.

#### 5.2 CLOSURE OBJECTIVES

The key objectives for mine closure are to return the area to its former state as far as is practically possible through rehabilitation of the mined area, and to leave it in a state which does not pose any safety hazard to both people and animals.

The rehabilitated mined area will form part of the natural environment and will not be used for any specific purpose in future.

An amount of R6 000 was provided in the EMP for rehabilitation of the mined area.

#### 5.3 CONTENTS OF CLOSURE PLAN

A closure plan contemplated in Regulation 62 of the Regulations promulgated in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), accompanies the application for closure of the mining area.

## 5.4 TRANSFER OF ENVIRONMENTAL LIABILITIES TO A COMPETENT PERSON

The holder of the mining permit does not wish to transfer any environmental liabilities and responsibilities to another person or persons.

## 5.5 NOTES ON LEGAL PROVISIONS

The holder of the mining permit, through the Environmental Control Officer, took cognisance of the provisions of the following legislation dealing with matters relating to environmental conservation:

- Environmental Conservation Act, 1989 (Act 73 of 1989)
- National Environmental Management Act, 1998 (Act 107 of 1998)
- National Water Act, 1998 (Act 36 of 1998)
- Mine Safety and Health Act, 1996 (Act 29 of 1996).

## 6. <u>SPECIFIC ADDITIONAL REQUIREMENTS DETERMINED BY THE REGIONAL MANAGER</u>

The Regional Manager: Department of Minerals and Energy, Limpopo Province, did not determine any specific additional requirements for the mining operation, since impacts on the environment were adequately mitigated by the provisions set within the Environmental Management Plan.

I. W. Terblanche

**Environmental Control Officer** 

30-03-2009

**DME REF. NO:** LP 30/5/1/3/3/2/ 534 EM

## CLOSURE OF BORROW PIT FOR MINING OF SAND ON PORTION 9 OF THE FARM PELGRIMSHOOP 630 LS

## **ENVIRONMENTAL RISK REPORT**

## Environmental Control Officer (ECO): I.W. Terblanche

An environmental risk report contemplated in Regulation 60 of the Regulations promulgated in terms of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), must accompany the application for closure of the mining area.

The following environmental risks were identified for the mining of sand on Portion 9 of the farm Pelgrimshoop 630 LS:

#### **Potential Significant Risk**

- Undercutting trees, resulting in the destruction of trees;
- Formation of deep excavations in the form of dams, posing a significant safety risk to people and livestock during the raining season.

#### **Uncertain Risk**

- Pollution as a result of littering by truck drivers and driver of front-end loader;
- Pollution as a result of disposal of foreign waste in the mining area;
- Soil erosion as a result of mining operations;
- Soil and water pollution as a result of oil, grease or diesel spills.

#### **Insignificant Risk**

- Creation of dust pollution by the movement of trucks and the mechanical loading of sand;
- Noise pollution.

The above potential risks were re-evaluated and re-classified after having considered mitigation measures:

### **Potential Significant Risk**

Potential significant risks were effectively mitigated and re-classified as insignificant risks.

#### **Uncertain Risk**

Uncertain risks were effectively mitigated and re-classified as insignificant risks.

#### **Insignificant Risk**

• Creation of dust pollution by the movement of trucks and the mechanical loading of sand:

Dust pollution was effectively mitigated by the use of a water cart and the spraying of the area with water when required. Access roads / tracks were naturally stabilised with couch grass and created virtually no dust.

• Noise pollution:

Noise pollution did not pose any significant environmental hazard because the mining area was about 800 to a 1 000 metres from the nearest settlement areas, effectively mitigating noise pollution.

• Undercutting trees, resulting in the destruction of trees (initially **potential significant** risk):

No undercutting of trees was allowed during mining operations and no trees were destroyed during mining. The mining area was located in a highly degraded area without any significant woody species.

• Formation of deep excavations in the form of dams, posing a significant safety risk to people and livestock during the raining season (initially **potential significant risk**):

No deep excavations or dams were formed in the mining area. Side walls of the excavated area were worked down to a slope of about 25 degrees from horizontal and the mined area was levelled as mining progressed.

• Pollution as a result of littering by truck drivers and driver of front-end loader (initially uncertain risk):

No littering was allowed or took place at the mining area. Only 2 to 3 people were present at the mining area at any specific time.

Pollution as a result of disposal of foreign waste in the mining area (initially uncertain risk):

There is no indication of any pollution in the mining area, as confirmed during a site inspection on 30-03-2009.

• Soil erosion as a result of mining operations (initially uncertain risk):

The mined area was levelled as mining progressed and care was taken not to leave the area vulnerable to erosion. There is no indication of any erosion in the rehabilitated mining area, as confirmed during a site inspection on 30-03-2009.

• Soil and water pollution as a result of oil, grease or diesel spills (initially uncertain risk):

No refuelling or servicing of vehicles or machinery was allowed in or near the mining area, which effectively mitigated the danger of soil / water pollution.

The ECO is satisfied that the rehabilitated mining area poses no environmental risk.

I. W. Terblanche

Tertekanche.

30-03-2009

## i.w.terblanche and associates

105 DE MEER STREET POLOKWANE 0699

(015) 298 8174 Fax: (015) 298 8779

E-mail: igme@netactive.co.za

Date: 30-03-2009

Municial Manager Polokwane Municipality P. O. Box 1110 Polokwane 0700

For attention: Mr. Tonie Muller

APPLICATION FOR CLOSURE OF BORROW PIT FOR THE MINING OF SAND: PORTION 9 OF THE FARM PELGRIMSHOOP 630 LS, POLOKWANE MUNICIPAL COUNCIL AREA, LIMPOPO PROVINCE

Herewith please find copies of the following documents for your information:

- Application for closure certificate
- Closure plan
- Performance assessment on the environmental management plan
- Environmental risk report

Should you require any further information regarding the application for a closure certificate, or have any comments, your are welcome to contact the Environmental Consultant at the above address or telephone number.

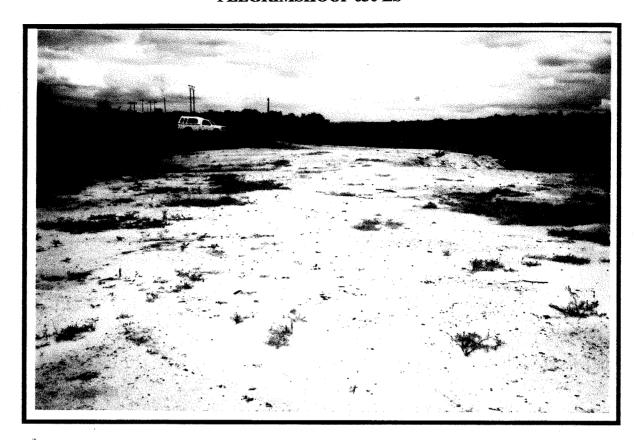
Yours sincerely,

Igmé Terblanche

**Environmental Consultant** 

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## BORROW PIT CLOSURE: PELGRIMSHOOP 630 LS



The mining area (borrow pit) has been leveled during rehabilitation and covered with seed-bearing topsoil to accelerate revegetation. The sides of the mining area were worked down to a gentle slope and no excavations that could form dams during the raining season were left in the mining area.



## BORROW PIT CLOSURE: PELGRIMSHOOP 630 LS



Natural revegetation has already started to take place in the rehabilitated mining area. The surrounding vegetation consists mainly of grass, scrub and a variety of alien weeds. There are no tall trees in the area adjacent to the mining area and no trees were removed from the mining area during the operational phase.

