

*ENVIRO LOGIC*

Environmental Impact Assessment, Planning and Management Services  
Omgewingsimpakbeoordeling, Beplanning- en Bestuursdienste



D: EA Ref. No: 12/9/11/L706/8  
D: E&NC Ref. No: NC/BA/NAM/RIC/EKS2/2011

21 October 2011

Dr. M. Galimberti  
APM Impact Assessor  
South African Heritage Resources Agency  
P. O. Box 4637  
CAPE TOWN  
8000

Dear Dr. Galimberti,

**APPLICATION: PROPOSED CONSTRUCTION OF SEWER OXIDATION PONDS  
AND ASSOCIATED INFRASTRUCTURE, EKSTEENSFONTEIN**

Attached please find a copy of the Background Information Document for your information.

The closing date for registration as I&AP and initial comment is Monday 21 November 2011.

Yours faithfully,

A handwritten signature in black ink, appearing to read "Pretorius".

Gert Pretorius (Pr.Sci.Nat.)

**ENVIRONMENTAL IMPACT ASSESSMENT**

**PUBLIC PARTICIPATION PROCESS: SCOPING & EIR**

**BACKGROUND INFORMATION DOCUMENT**

**PROPOSED SEWER OXIDATION PONDS AND ASSOCIATED INFRASTRUCTURE,  
EKSTEENSFONTEIN**

Department of Environmental Affairs Reference No: 12/9/11/L706/8

Department of Environment and Nature Conservation Reference No: NC/BA/NAM/RIC/EKS2/2011

**October 2011**



**OMGEWINGSIMPAKBEORDELING**

**OPENBARE DEELNAMEPROSES: OMVANGBEPALING EN  
OMGEWINGSINVLOEDBEPALINGSPROSES**

**AGTERGRONDINLIGTINGSDOKUMENT**

**VOORGESTELDE RIOOL OKSIDASIE DAMME EN VERWANTE INFRASTRUKTUUR,  
EKSTEENSFONTEIN**

Departement van Omgewingsake Verwysings Nr: 12/9/11/L706/8

Departement Omgewing en Natuurbewaring Verwysings Nr: NC/BA/NAM/RIC/EKS2/2011

**Oktober 2011**

## **Background Information Document**

Notice is hereby given of a public participation process in terms of the Environmental Impact Assessment ("EIA") Regulations 2010 promulgated in terms of National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA").

### **1. Introduction**

Delivering proper services in urban areas is one of the key objectives identified in the 2009 Richtersveld Integrated Development Plan. The provision of sanitation that is safe for users as well as the environment is recognised as one of the cornerstones in the effort to produce efficient service delivery in small urban settings. Sound infrastructure forms the backbone for proper long term provision of basic sanitation services.

The proposed development entails the construction of Oxidation- and Evaporation ponds which are HDPE lined to prevent leakage from the ponds, as well as the construction of a sewer pump station, the excavation of pipe trenches and the installation of underground pipelines of ± 1,7 km. Adequate fencing will be installed around the ponds for safety and security purposes.

*ENVIRO LOGIC* has been appointed by the Richtersveld Municipality as independent Environmental Assessment Practitioners (EAP) to carry out the Environmental Impact Assessment process for the proposed construction of sewer oxidation ponds and associated infrastructure in terms of the *National Environmental Management Act (NEMA) 1998*, (Act No. 107 of 1998) as amended and the *National Environmental Management: Waste Act, 2008* (Act No. 59 of 2008). This is required as the proposed project triggers several of the listed activities identified in the *Environmental Impact Assessment Regulations 2010* as well as the *National Environmental Management: Waste Act, 2008* (No. 59 of 2008) "List of Waste Management Activities that have , or are likely to have a detrimental effect on the environment." The process will investigate if there are any potential significant detrimental impacts to the receiving environment from the proposal. It will also provide an opportunity for the public and key role players to give input and participate in the process, as well as for specialist input on specific aspects.

An Application for Authorisation in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) as amended, and the Environmental Impact Assessment Regulations, 2010 was submitted to the Department of Environment and Nature Conservation, Northern Cape Province. Reference No.: NC/BA/NAM/RIC/EKS2/2011

An application for a Waste Management Licence in terms of the *National Environmental Management: Waste Act, 2008* (No. 59 of 2008) was submitted to the Department of Environmental Affairs. Reference No.: 12/9/11/L706/8

### **2. Applicant & Consultants**

The Applicant for the proposed development is the **Richtersveld Municipality, Port Nolloth**.

The Consulting Engineers are **BVi Consulting Engineers (Springbok)**.

The Environmental Assessment Practitioner ("EAP") is **ENVIRO LOGIC**.

An Archaeological Impact Assessment will be conducted by the **Agency for Cultural Resource Management (ACRM)**.

A Geohydrological assessment will be done by **SRK Consulting**.

### **3. Legal Processes**

Before any development can occur, the applicant has to satisfy the requirements of several sets of legislation. The requirements of the National Environmental Management Act (NEMA), 1998 (Act No. 107 of 1998), the National Environmental Management: Waste Act, 2008 (No. 59 of 2008), the National Water Act (No. 36 of 1998) and the National Heritage Resources Act, 1999 (Act No. 25 of 1999) will be satisfied simultaneously with this current EIA process.

- Installation of security/ safety fences around the ponds.

## 5.2 Sewer Pipelines and Pump stations

- Construction of a sewer pump station, the excavation of pipe trenches and the installation of underground pipelines of lengths ± 1,7 km.

## 5.3 Access Roads

- Construction of a gravel access road with a width of 6 meters and ± 0,4 km long.

## 5.4 The activities on site will be as follows.

Sewage waste of about 65m<sup>3</sup>/day will be pumped daily to the sewer oxidation ponds. A pump station with a sump will be constructed near the town where the sewage from the sewer network will converge to be pumped to the oxidation ponds. The inlet structures of the ponds is located at ponds 1 & 2 (anaerobic ponds). From ponds 1 & 2 the sewage will flow through to pond 3 (primary pond) and finally through to ponds 4 & 5 (evaporation ponds).

(See Site Layout Plan: Appendix B).

## 6. Environmental considerations

Various environmental considerations will be taken into account through the Scoping Process. A specialist Geohydrologist and Archaeologist will be appointed to access potential impacts within their specialty field.

## 7. Project Location

The village of Eksteensfontein is situated in the Northern Cape and falls within the Richtersveld Municipal area.

## 8. Alternatives

### 8.1 Alternative 1 (Preferred Alternative)

The proposed sewer oxidation and evaporation ponds will be located more than 600m northeast of the village of Eksteensfontein with underground pipelines and other associated infrastructure to be brought on towards and in the town itself.

Coordinates: 28° 48' 54.98" S  
17° 16' 5.91" E

(See Location Plan Alternative 1: Appendix A).

### 8.2 Alternative 2

An alternative site for the construction of the sewage oxidation ponds and associated infrastructure has been identified about 500m west of the Alternative 1 site.

Coordinates: 28° 48' 58.31" S  
17° 15' 45.48" E

(See Location Plan Alternative 2: Appendix A).

### 8.3 "No-Go" Alternative

The "No-Go" Alternative although always considered, will only be recommended if severe issues cause the project to become problematic.

Any alternatives put forward through written comment by Interested and Affected Parties will be considered.

## Agtergrondinligtingsdokument

Kennis word hiermee gegee van 'n openbare deelname proses ingevolge die Omgewingsinvloedbepalingsregulasies 2010 uitgevaardig in terme van artikel 24 (5) van die Wet op Nasionale Omgewingsbestuur, 2008 (Wet Nr. 107 van 1998).

### **1. Inleiding**

Voldoende dienslewering vir dorpe word as 'n belangrike kwessie identifiseer in die 2009 Richtersveld Geïntigreerde Ontwikkelingsplan. Die voorsiening van sanitasie wat veilig is vir gebruikers sowel as vir die omgewing word beklemtoon as een van die hoekstene in die poging om doeltreffende dienslewering te bewerkstellig. Geskikte infrastruktuur vorm die ruggraat vir die voldoende langtermyn verskaffing van basiese sanitasie dienste.

Die voorgestelde projek behels die konstruksie van riool oksidasie- en verdampingsdamme wat belyn is met "HDPE" om lekasies vanaf dié damme te voorkom, asook die konstruksie van 'n rioolpompstasie en installering van 'n ondergrondse rioolpyplyn van ± 1.7km. Draad omheinings sal rondom die riool fasiliteit aangebring word vir sekuriteits en veiligheids doeleinades.

*ENVIRO LOGIC* is deur die Munisipaliteit Richterveld aangestel as die onafhanklike omgewings assessorings praktisys om die Omgewingsinvloedbepalingsproses te onderneem vir die voorgestelde projek in terme van die Wet op Nasionale Omgewingsbestuur ("NEMA") 1998, (Wet Nr. 107 van 1998) soos gewysig, asook die Wet op Nasionale Omgewingsbestuur: Wet op Afval, 2008 (Wet Nr. 59 van 2008). Dit word vereis omdat die voorgestelde projek verskeie gelyste aktiwiteite aktiever wat geïdentifiseer is in die Omgewingsinvloedbepalings Regulasies van 2010, asook in die Wet op Nasionale Omgewingsbestuur: Wet op Afval, 2008 (Wet Nr. 59 van 2008), "Lys van afval bestursaktiwiteite wat, of wat waarskynlik, 'n nadelige uitwerking op die omgewing kan hê." Die proses sal bepaal of die voorgestelde projek enige betekenisvolle nadelige impak op die omliggende omgewing mag hê. Dit sal ook 'n geleentheid vir die publiek en sleutel rolspelers bied om insette te lewer en deel te neem aan die proses, sowel as vir spesialis insette oor spesifieke aspekte.

'n Aansoek om Omgewingsmagtiging in terme van die Wet op Nasionale Omgewingsbestuur (NEMA) 1998, (Wet Nr. 107 van 1998) soos gewysig, asook die Omgewingsinvloedbepalings Regulasies van 2010 is by die Departement van Omgewing en Natuurbewaring, Noord-Kaap, ingedien. Verwysingsnommer: NC/BA/NAM/RIC/EKS2/2011

'n Aansoek vir 'n Afvalbestuurslisensie in terme van die Wet op Nasionale Omgewingsbestuur: Wet op Afval, 2008 (Wet Nr. 59 van 2008) is by die Departement van Omgewingsake ("D:EA") ingedien. Verwysingsnommer: 12/9/11/L706/8

### **2. Aansoeker & Konsultante**

Die Aansoeker vir die voorgestelde ontwikkeling is die **Munisipaliteit Richtersveld, Port Nolloth**.

Die Raadgewende Ingenieurs is **BVi Raadgewende Ingenieurs (Springbok)**.

Die Omgewingsbeoordelingspraktisy ("OBP") is **ENVIRO LOGIC**.

'n Argeologiese ondersoek sal deur die **"Agency for Cultural Resource Management (ACRM)"** gedoen word.

'n Geohidrologiese ondersoek sal deur **SRK Raadgewend** gedoen word.

### **3. Wetlike Prosesse**

Voordat enige ontwikkeling in aanvang kan neem, moet daar deur die Aansoeker aan verskeie wetlike vereistes voldoen word. Die vereistes van die Wet op Nasionale Omgewingsbestuur (NEMA) 1998, (Wet Nr. 107 van 1998) soos gewysig; die Wet op Nasionale Omgewingsbestuur: Wet op Afval 2008 (Wet Nr. 59 van 2008); die Nasionale Waterwet, 1998 (Wet Nr. 36 van 1998) en die Nasionale Erfenishulpbronnewet, 1999 (Wet Nr. 25 van 1999) sal nagekom word tydens die huidige Omgewingsinvloedbepalingsproses.

## **5. Projek Voorstel:**

### **5.1 Oksidasie damme:**

- Konstruksie van nuwe riool oksidasiedamme, met verdampingsdamme.
- Die konstruksie van in-en uitlaat strukture om water van een dam na 'n ander te lei.
- Installering van "HDPE" voering om lekkasie van die damme te voorkom.
- Oprig van sekuriteits / veiligheids omheinings by die riooldamme.

### **5.2 Riool pyleidings en Pompstasies**

- Konstruksie van 'n riool-pompstasie, die grawe van slotte en die installering van 'n ondergrondse rioolpyplyn van ± 1,7 km.

### **5.3 Toegangspaaie**

- Konstruksie van gruis toegangspad met 'n wydte van 6 meter en ± 0,4 km lank.

### **5.4 Die aktiwiteite op die terrein sal soos volg wees.**

Riool afval van ongeveer 65m<sup>3</sup> / dag sal daagliks gepomp word na die riool oksidasie-damme. 'n Pompstasie met 'n rioolvuilput sal gebou word naby die dorp waar die riool van die riool-netwerk sal bymekaarkom en vandaar gepomp word na die oksidasie-damme. Die inlaatstrukture van die damme is geleë by damme 1 & 2 (anaerobiese damme). Vanaf damme 1 & 2 sal die riool deur dam 3 (primêre dam) vloei en vandaar na damme 4 & 5 (verdampings damme). (Sien Terrein Uitlegplan: Bylae B).

## **6.Omgewing oorwegings**

Verskeie omgewings oorwegings sal in ag geneem word tydens die Omvangbepalingsproses. 'n Argeoloog en Geohidroloog sal aangestel word om die potensiële impakte in hulle spesialiteitsveld te asseseer.

## **7. Projek Ligging**

Die dorp Eksteensfontein is in die Noord-Kaap geleë en val binne die Richtersveld Munisipale gebied.

## **8. Alternatiewe**

### **8.1 Alternatief 1 (Voorkeur Alternatief)**

Die voorgestelde riool oksidasie en verdampings damme sal meer as 600 m noordoos van die dorp Eksteensfontein geleë wees met pyleidings en ander verwante infrastruktuur na en in die dorp self.

Koördinate: 28° 48' 54.98" S  
17° 16' 5.91" O

(Sien Liggingsplan Alternatief 1: Bylae A)

### **8.2 Alternatief 2**

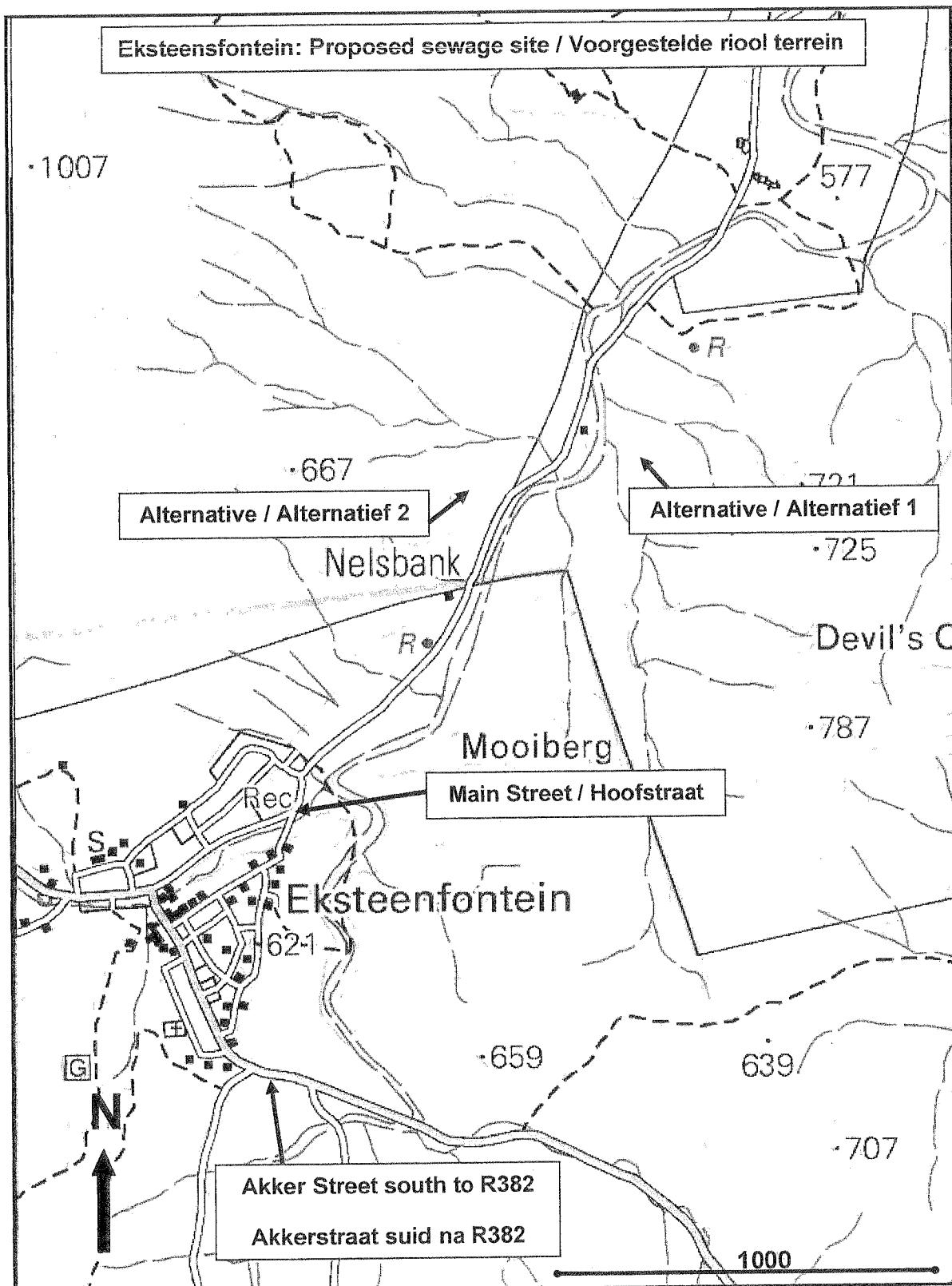
'n Alternatiewe terrein vir die oprigting van die riool oksidasie damme en verwante infrastruktuur is ongeveer 500 m wes van die Alternatief 1 terrein geïdentifiseer.

Koördinate: 28° 48' 58.31" S  
17° 15' 45.48" O

(Sien Liggingsplan Alternatief 2: Bylae A)

### **8.3 "Status quo" (bestaande situasie) Alternatief**

Die "Status quo" (bestaande situasie) alternatief, hoewel dit altyd oorweeg word, sal slegs aanbeveel word as ernstige probleme veroorsaak dat die projek te problematies word.



Locality Plan / Liggingsplan

Scale 1:50 000

Alternative / Alternatief 1:  $28^{\circ} 48' 54.98''$  S /  $17^{\circ} 16' 5.91''$  E/O

Alternative / Alternatief 2:  $28^{\circ} 48' 58.31''$  S /  $17^{\circ} 15' 45.48''$  E/O

## COMMENT SHEET (BID)

### PROPOSED SEWER OXIDATION PONDS AND ASSOCIATED INFRASTRUCTURE EKSTEENSFONTEIN

Department of Environmental Affairs Ref. No: 12/9/11/L706/8

Department of Environment and Nature Conservation Ref. No: NC/BA/NAM/RIC/EKS2/2011

Please complete the following details and Fax to (021) 919 4048 or mail to **ENVIRO LOGIC** (Eksteensfontein), P.O.Box 3731, Tyger Valley, 7536 or E-mail: gpec12@telkomsa.net, to reach us before or on **Monday 21 November 2011**.

Name: .....

Organisation: .....

Address: .....

Postcode: .....

Phone number: .....

Cellphone number: .....

Fax number: .....

E-mail: .....

Date: .....

***Should your details change during this process it is your responsibility to send us updated information.***

How would you prefer to receive future project information?

Please tick the appropriate box: Post  Fax  E-mail

Do you have any direct interest in the approval or refusal of the proposed project by the environmental authorities? Please tick the appropriate box/es below.

#### BUSINESS/ FINANCIAL

Competing business Yes  No

Neighbouring business Yes  No

Potential employment opportunities Yes  No

Service provision Yes  No

#### PERSONAL

Neighbour to proposed project site Yes  No

OTHER (please explain) ..... Yes  No

Signature: ..... Date: .....

## KOMMENTAARBLAD (AID)

### VOORGESTELDE RIOOL OKSIDASIE DAMME EN VERWANTE INFRASTRUKTUUR EKSTEENSFONTEIN

Departement van Omgewingsake Verw. Nr: 12/9/11/L706/8

Departement van Omgewing en Natuurbewaring Verw. Nr: NC/BA/NAM/RIC/EKS2/2011

Voltooи asseblief en faks aan 021- 919 4048 óf pos dit aan **ENVIRO LOGIC** (Eksteensfontein), Posbus 3731, Tygervallei, 7536 óf E-pos: [gpec12@telkomsa.net](mailto:gpec12@telkomsa.net), om ons te bereik voor of op **Maandag 21 November 2011**.

**Naam:**.....

**Organisasie:**.....

**Posadres:**.....

.....**Poskode:**.....

**Telefoonnummer:** .....

**Selfoonnnummer:** .....

**Faksnommer:** .....

**E-pos:** .....

**Sou u kontak besonderhede gedurende die Omgewingsimpakproses verander, is dit u verantwoordelikheid om die opgedateerde inligting aan ENVIRO LOGIC te voorsien.**

Hoe sal u verkies om inligting oor die projek in die toekoms te ontvang?

Merk asseblief die toepaslike blok: Pos  Faks  E-pos

Het u enige direkte belang in die goedkeuring of afkeuring van die voorgestelde projek deur die betrokke omgewingsowerhede? Merk asseblief die toepaslike blok hieronder.

#### BESIGHEID/ FINANSIEËL

Kompetenderende Besigheid Ja  Nee

Aangrensende besigheid Ja  Nee

Potentiële werksgeleenthede Ja  Nee

Dienste voorsiening Ja  Nee

#### PERSOONLIK

Aangrensend tot projek terrein Ja  Nee

**ANDER** (verduidelik asseblief) ..... Ja  Nee

**HANDEKENING:**..... **DATUM:**.....

SA HERITAGE RESOURCES

RECEIVED

23-10-11

**ENVIRO LOGIC**  
Environmental Impact Assessment, Planning and Management Services  
Omgewingsimpakbeoordeling, Beplanning- en Bestuursdienste

D: EA Ref. No: 12/9/11/L701/8  
D: E&NC Ref. No: NC/BA/NAM/RIC/KUB2/2011

Case ref: 1710

21 October 2011

Dr. M. Galimberti  
APM Impact Assessor  
South African Heritage Resources Agency  
P. O. Box 4637  
CAPE TOWN  
8000

Dear Dr. Galimberti,

**APPLICATION: PROPOSED CONSTRUCTION OF SEWER OXIDATION PONDS  
AND ASSOCIATED INFRASTRUCTURE, KUBOES**

Attached please find a copy of the *Background Information Document* for your information.

The closing date for registration as I&AP and initial comment is Monday 21 November 2011.

Yours faithfully,



Gert Pretorius (Pr.Sci.Nat.)

P.O. Box/Posbus 3731  
TYGERVALLEY/  
TYGERVALLEI, 7536  
Phone/Tel: (021) 919 4048  
Fax/Faks: (021) 919 4048  
Cell/Sel: 082 458 9844