

caseid: 1607

APPENDICES – VOLUME 1 OF 2

**DRAFT ENVIRONMENTAL IMPACT REPORT AND DRAFT
ENVIRONMENTAL MANAGEMENT PROGRAM (NEMA)**

Report No.: JW45/11/B478 - Rev C

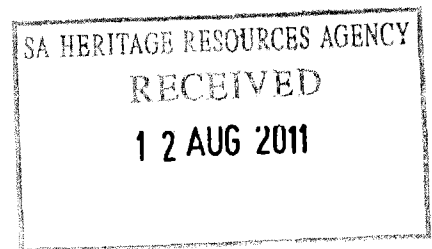
MDEDET REF NUMBER: 17/2/3/N28

DEA REF NUMBER: 12/9/11/L492/6

MINING LICENSE: 9/99 issued under DMR REF: OT/5/3/2/49

Conversion under DMR REF NUMBER MP30/5/1/2/2/379MR

JULY 2011



Jones & Wagener

Consulting Civil Engineers

59 Bevan Road PO Box 1434 Rivonia 2128 South Africa

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DOUGLAS TAVISTOCK JOINT VENTURE
MIDDELBURG WATER RECLAMATION PLANT PROJECT
ENVIRONMENTAL IMPACT ASSESSMENT

Draft EIR

Report: JW45/11/B478 - Rev C

Appendix A: Authority Consultation

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- A.5 Final Scoping Report – Letter from MDEDET
- A.6 Final Scoping Report – Letter from DEA

A.1 EIA Application Form



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Consulting Civil Engineers

59 Bevan Road PO Box 1434 Rivonia 2128 South Africa
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Ms D. Tswai
Directorate: Impact Assessment
Mpumalanga Department of Economic Development,
Environment and Tourism
Private Bag X7255
WITBANK
1035

25 November, 2010

Our Ref: **B478**
b478mvz01_I_mwrp_mdedet_sept2010.docx

Attention: Ms Dineo Tswai

Dear Madam

MIDDELBURG WATER RECLAMATION PROJECT: APPLICATION FOR PROJECT REGISTRATION NUMBER

Please find attached hereto the completed project registration form and supporting figures for the registration of the proposed Middelburg Water Reclamation Project (MWRP) with a view to proceeding with a Scoping and EIA process for the project. The MWRP is a project of the Douglas Tavistock Joint Venture (DTJV). The DTJV is a joint venture between BHP Billiton Energy Coal South Africa (Pty) Limited and Tavistock Collieries (Pty) Limited.

We have identified a number of activities from those listed in GNR 544, 545 and 546 of 18 June 2010, which require that a Basic Assessment and Scoping and Environmental Impact Assessment (EIA) be undertaken. These activities are listed and described in the attached registration form. As GNR 545 activities have been triggered by the proposed MWRP, a Scoping and EIA process will be required.

Jones & Wagener will be conducting the EIA process for authorisation and prepare the required Scoping Report, EIA report and EMP. These documents will be supported by specialist studies where required. Technical input, such as the preliminary design and operating plans will be provided by the technical design team. We will obtain the technical information from that team in order to inform the EIA process and EMP.

The MWRP also requires an integrated water use licence under the provisions of the National Water Act, which will be prepared by us. A number of waste management activities also require licensing under the provisions of the National Environment Management: Waste Act from the National Department of Environmental Affairs. Although a number of acts are applicable to the project, we will be conducting one integrated EIA process, which includes the required Public Participation Process (PPP).

A meeting was held with the Mpumalanga Department of Economic Development, Environment and Tourism's (MDEDET's) Dr G. Batchelor and Mr F. Theledi on 25 August 2010. The approach suggested in the foregoing paragraph was discussed with them at that meeting. Due to circumstances, there was no representation from MDEDET's eMalahleni office at this meeting but authority feedback meetings at strategic points in the project to discuss progress and issues will be arranged.

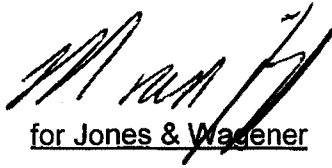
JONES & WAGENER (PTY) LTD REG NO. 1993/02655/07 VAT No 4410136685

DIRECTORS: PW Day (Chairman) PEng MS(Eng) FSAICE D Brink (CEO) PEng Hons BEng FSAICE PG Gage PEng CEng BS(Eng) GDEMSAICE AISrudE JP van der Berg PEng PhD MEng MSAICE TT Goba PEng MEng FSAICE GR Wardle (Alternate) PEng MS(Eng) FSAICE
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CONSULTANTS: W Ellis PEng CEng MISrudE **FINANCIAL MANAGER:** HC Neveling BCom MBL

Member of Consulting Engineers South Africa

Please contact the undersigned at telephone 011 519 0200 or e-mail vanzyl@jaws.co.za should the department have any queries.

Yours faithfully



for Jones & Wagener

Cc: Mr S. Brown: BHP Billiton Energy Coal South Africa
Mr F Theledi: Mpumalanga Department of Economic Development, Environment and Tourism.

Document source: C:\Alljobs\B478 Water Treatment Plant\Reports\Licence Application Form\B478mvz01_L_MWRP_DEA_Reg_Sept2010.docx
Document template: Letter_tem_Rev2_Jun10.dotx



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

(For official use only)

File Reference Number:

NEAS Reference Number:

Date Received:

Responsible Official:

PROJECT TITLE

Middelburg Water Reclamation Project

Kindly note that:

1. This application form is current as of 2 August 2010. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority.
2. The application must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. Spaces are provided in tabular format and will extend automatically when each space is filled with typing.
3. Where applicable black out the boxes that are not applicable in the form.
4. Incomplete applications may be returned to the applicant for revision.
5. The use of the phrase "not applicable" in the form must be done with circumspection. Should it be done in respect of material information required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the Regulations.
6. This form must be submitted to the Department at the postal address of the relevant **DISTRICT OFFICE** given below or by delivery thereof to the relevant **DISTRICT OFFICE**. Should the application form not be submitted at the relevant district office, it will not be considered.
7. No faxed or e-mailed applications will be accepted.
8. If the applicant is not the owner or person in control of the land on which the activity is to be undertaken, the written notice of the proposed activity as referred to in Regulation 15, as well as proof of serving such notice on the owner or person in control of the land, must be attached to this form. Should the application form not be accompanied by such notice, it will be rejected.
9. If permission has been granted in terms of Regulation 20(3) to apply S&EIR instead of basic assessment to the application, or if permission has been granted in terms of 20(4) to apply basic assessment instead of S&EIR to the application, a copy of such authorisation must be attached to this application form.
10. Unless protected by law, all information filled in on this application will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this application on request, during any stage of the application process.

HEAD OFFICE (18 Jones Street, Nelpruit)	EHLANZENI DISTRICT (18 Jones Street, Nelspruit)	NKANGALA DISTRICT (Pavilion Centre, Cnr Botha & Northey Streets, Witbank)	GERT SIBANDE DISTRICT (13 De Jager Street, Ermelo)
Attention: Directorate: Environmental Impact Management Private Bag X 11219 Nelspruit, 1200 Queries should be directed to the Directorate: Environmental Impact Management at: Tel: (013) 759 4000 Fax (013) 759 4165	Attention: Directorate: Environmental Impact Management Private Bag X 11219 Nelspruit, 1200 Queries should be directed to the Directorate: Environmental Impact Management at: Tel: (013) 759 4000 Fax (013) 759 4165	Attention: Directorate: Environmental Impact Management P. O. Box 7255 Witbank, 1035 Queries should be directed to the Directorate: Environmental Impact Management at: Tel: Fax:	Attention: Directorate: Environmental Impact Management P. O. Box 2777 Ermelo, 2351 Queries should be directed to the Directorate: Environmental Impact Management at: Tel: Fax:

SITE IDENTIFICATION AND LINKAGE

Please indicate all the Surveyor-general 21 digit site (erf/farm/portion) reference numbers for all sites (including portions of sites) that are part of the application.

S	E	E	A	N	N	E	X	U	R	E	"A"	A	T	T	A	C	H	E	D

(if there are more than 6, please attach a list with the rest of the numbers)
 (These numbers will be used to link various different applications, authorisations, permits etc. that may be connected to a specific site)

PROJECT TITLE

Middelburg Water Reclamation Project

The entire project will entail the following (full detail of the project can also be appended):

The construction and operation of a water treatment plant and associated pipelines for the transfer and treatment of excess impacted mine water from Middelburg Mine -North and Klipfontein Sections. The treatment plant will have capacity to treat 30 000 cubic metres of water per day.

1. BACKGROUND INFORMATION

Project applicant:	DOUGLAS-TAVISTOCK JOINT VENTURE (DTJV)		
Trading name (if any):			
Contact person:	Mr Stephan Brown		
Physical address:	6 HOLLARD STREET JOHANNESBURG		
Postal address:	P.O.BOX 61075 MARSHALLTOWN		
Postal code:	2107	Cell:	
Telephone:	013 689 3051	Fax:	013 689 3085
E-mail:	Steve.brown@bhpbilliton.com		

Environmental Assessment Practitioner:	Jones & Wagener Consulting Civil Engineers Marius van Zyl		
Contact person:	Marius van Zyl		
Postal address:	PO Box 1434, Rivonia		
Postal code:	2128	Cell:	082 880 1250
Telephone:	011 519 0217	Fax:	011 519 0201
E-mail:	vanzyl@jaws.co.za		
Qualifications & relevant experience	BSc Honours Biochemistry and Environmental Management Experience: 25 years experience in water and waste management		
Professional affiliation(s) (if any)	Pr.Sci.Nat (Registration no.:400171/87)		

Landowner:	See Annexure B		
Contact person:			
Postal address:			
Postal code:		Cell:	
Telephone:		Fax:	
E-mail:			

In instances where there is more than one landowner, please attach a list of landowners with their contact details to this application.

District Municipality in whose jurisdiction the proposed activity will fall (Delete which is not applicable):

Ehlanzeni	Nkangala	Gerf Sibande
-----------	----------	--------------

Local authority in whose jurisdiction the proposed activity will fall:

Steve Tshwete Local Municipality		
Middelburg		
Ms B Maleka		
PO Box 14, Middelburg		
1050	Cell:	
013 249 7000	Fax:	013 243 2550
council@stevetshwetelm.gov.za		

In instances where there is more than one local authority involved, please attach a list of local authorities with their contact details to this application.

Property description/physical address:

Undeveloped land within the Middelburg Mine Services North Section mine boundary. Two sites have been identified for the construction of the water treatment plant – See attached Figure 1. There are no formal access roads to the alternative sites.

The Middelburg Water Reclamation Project, including the plant area and pipelines could be located on the farms and portions indicated on Annexure B.
(Farm name, portion, registration division etc.) Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application.

Current land-use zoning:

Agricultural

In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application.

Locality map:

A locality map must be attached to this document. The scale of the locality map must be relevant to the size of the development (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 map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (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 degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection).

2. ACTIVITIES APPLIED FOR TO BE AUTHORISED

For an application for authorisation that involves more than one listed or specified activity that, together, make up one development proposal, all the listed activities pertaining to this application must be indicated.

Indicate the number and date of the relevant notice:	Activity No (s) (in terms of the relevant notice) :	Describe each listed activity as per the detailed project description (and not as per wording of the relevant Government Notice) ¹ :
GNR 544 (June 2010)	9	The project involves the construction of several pipelines for the transfer of excess impacted mine water from various sections of the mine to the treatment plant. In addition, a pipeline will also be constructed to discharge the treated water into the Niekerkspruit. The pipelines will be: <ul style="list-style-type: none"> • Longer than 1 km in most cases • Pass over several properties, • Have a diameter of 0.36 metres or more, and • In some instances convey > 120 litres per second.
GNR 544 (June 2010)	12	In order to blend the water from the various sections of the mines, a balancing dam is required. For Phase 1, treatment of 15 000 cubic metres (m ³) of water per day, the balancing dam will only be 30 000 m ³ in size, but when Phase 2 is added, the capacity will increase to 60 000 m ³ .
GNR 544 (June 2010)	13	In the water treatment process hazardous substances (goods) such as lime, hydrochloric and sulphuric acid, etc, will be used. The total amount to be stored and handled on site will be in the order of 250 m ³ .
GNR 544 (June 2010)	18	The pipelines to be used for the transfer of the impacted water to the treatment plant will cross watercourses at some points. During the construction of these pipelines more than 5m ³ of in situ material will be excavated in order to lay the pipes. The removed material will be placed back.
GNR 544 (June 2010)	22	Depending on the location of the water treatment plant, an access road with a width of 12.5 metres will be required.
GNR 545 (June 2010)	23	The water treatment plant, together with the gypsum waste disposal

¹ Please note that this description should not be a repetition of the listed activity as contained in the relevant Government Notice, but should be a brief description of activities to be undertaken as per the project description

		facilities and mine water balancing dam will cover an area of more than 20 hectares. In addition, the treatment plant, which is a separate entity, is regarded as an industrial activity.
GNR 545 (June 2010)	5	The construction and operation of the water treatment facility requires an integrated water use licence in terms of the provisions of the National Water Act for, inter alia, the storage of impacted water and the discharge of treated water to the environment.
GNR 546 (June 2010)	4	The access road to the water treatment plant could be wider than 4 metres with a reserve less than 13.5 metres, which is located within a critical biodiversity area as identified in the Mpumalanga Biodiversity Conservation Plan.
GNR 546 (June 2010)	13	More than 1 hectare of land will be cleared, which falls within a critical biodiversity area as identified in the Mpumalanga Biodiversity Conservation Plan.
GNR 546 (June 2010)	14	In order to construct the water treatment plant and associated infrastructure, an area of > 5 hectares of indigenous vegetation will be cleared.

Please note that any authorisation that may result from this application will only cover activities specifically applied for.

3. TYPE OF APPLICATION

3.1 Application for Basic Assessment

Is this an application for conducting a basic assessment (as defined in the Regulations)?

NO

Please indicate when the basic assessment report will be submitted:

3.2 Application for Scoping and Environmental Impact Assessment (S&EIR)

Is this an application for Scoping and EIR (as defined in the Regulations)?

YES

Please indicate when the Scoping Report (including the Plan of Study for EIA) will be submitted:


THE INDICATIVE DATE FOR SUBMISSION IS FEBRUARY 2011

4. DECLARATIONS

4.1 The Applicant

I, S. Brown declare that I -

- am, or represent², the applicant in this application;
- have appointed / will appoint (delete that which is not applicable) an environmental assessment practitioner to act as the independent environmental assessment practitioner for this application / will obtain exemption from the requirement to obtain an environmental assessment practitioner³;
- will provide the environmental assessment practitioner and the competent authority with access to all information at my disposal that is relevant to the application;
- will be responsible for the costs incurred in complying with the Environmental Impact Assessment Regulations, 2010, including but not limited to –
 - costs incurred in connection with the appointment of the environmental assessment practitioner or any person contracted by the environmental assessment practitioner;
 - costs incurred in respect of the undertaking of any process required in terms of the Regulations;
 - costs in respect of any fee prescribed by the Minister or MEC in respect of the Regulations;
 - costs in respect of specialist reviews, if the competent authority decides to recover costs; and
 - the provision of security to ensure compliance with conditions attached to an environmental authorisation, should it be required by the competent authority;
- will ensure that the environmental assessment practitioner is competent to comply with the requirements of these Regulations and will take reasonable steps to verify whether the EAP complies with the Regulations;
- will inform all registered interested and affected parties of any suspension of the application as well as of any decisions taken by the competent authority in this regard;
- am responsible for complying with the conditions of any environmental authorisation issued by the competent authority;
- hereby indemnify the Government of the Republic, the competent authority and all its officers, agents and employees, from any liability arising out of the content of any report, any procedure or any action which the applicant or environmental assessment practitioner is responsible for in terms of these Regulations;
- will not hold the competent authority responsible for any costs that may be incurred by the applicant in proceeding with an activity prior to obtaining an environmental authorisation or prior to an appeal being decided in terms of these Regulations;
- will perform all other obligations as expected from an applicant in terms of the Regulations;
- all the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of regulation 71 and is punishable in terms of section 24F of the Act.


Signature of the applicant⁴/ Signature on behalf of the applicant:

Name of company (if applicable):


2010/11/25
Date:


Signature of Commissioner of Oaths

2010/11/25
Date:

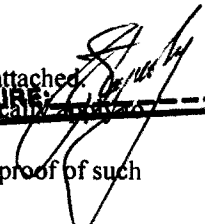
Security Ops Manager
Designation:

Official stamp (below)

SIGNED: 
Nicolaas Jacobus Louis Steyn
COMMISSIONER OF OATH
EX-OFFICIO: R.S.A.
ASSIST. SECURITY MANAGER
MIDDELBURG MINE SERVICES PTY LTD
VAN DYKSDRIFT ROAD
HARTEBESFONTEIN FARM
MIDDELBURG
11050

**MIDDELBURG MINI
NORTH SECTION
SECURITY DEPT.**

2010 -11- 25


SIGNATURE: _____

² If this is signed on behalf of the applicant, proof of such authority from the applicant must be attached.

³ If exemption is obtained from appointing an EAP, the responsibilities of an EAP will be those of the person conducting the environmental impact assessment in terms of the Regulations.

⁴ If the applicant is a juristic person, a signature on behalf of the applicant is required as well as proof of such authority.

4.2 The Environmental Assessment Practitioner

I, Marius van Zyl declare that -

General declaration:

- I act as the independent environmental practitioner in this application
- I act independently
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, regulations and all other applicable legislation;
- I will take into account, to the extent possible, the matters listed in regulation 8 of the regulations when preparing the application and any report relating to the application;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- I will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not
- all the particulars furnished by me in this form are true and correct; and
- I realise that a false declaration is an offence in terms of regulation 71 and is punishable in terms of section 24F of the Act; and
- I will adhere to and comply with all responsibilities as indicated in the National Environmental Management Act and Environmental Impact Assessment.

Disclosure of Vested Interest (delete whichever is not applicable)

- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2010;
- I have a vested interest in the proposed activity proceeding, such vested interest being:

Not applicable

M van Zyl
Signature of the environmental assessment practitioner:

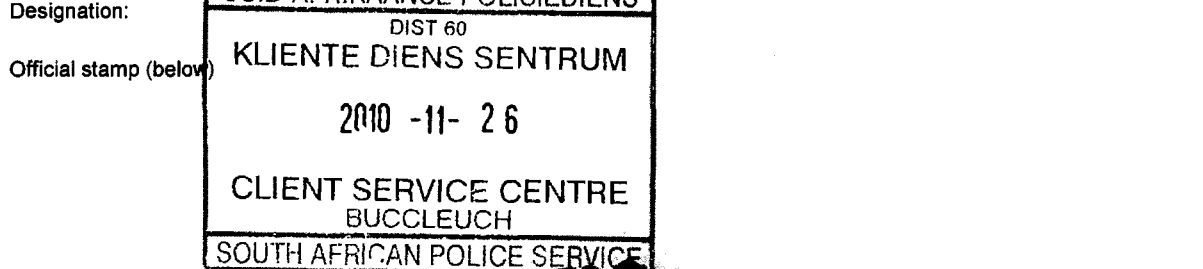
Jones & Wagener (Pty) Ltd
Name of company:

26 November 2010
Date:

[Signature] 7009591-3
Signature of Commissioner of Oaths

2010-11-26
Date:

CONSTABLE
Designation:



Annexure A

T	O	J	S	0	0	0	0	0	0	0	0	0	4	6	8	0	0	0	0	1		
T	O	J	S	0	0	0	0	0	0	0	0	0	3	4	0	0	0	0	0	4		
T	O	J	S	0	0	0	0	0	0	0	0	0	3	4	0	0	0	0	2	5		
T	O	J	S	0	0	0	0	0	0	0	0	0	3	4	0	0	0	0	2	6		
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T	O	J	S	0	0	0	0	0	0	0	0	0	3	1	5	0	0	0	3	8		
T	O	J	S	0	0	0	0	0	0	0	0	0	3	1	5	0	0	0	0	5		
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T	O	J	S	0	0	0	0	0	0	0	0	0	3	1	4	0	0	0	0	4		
T	O	J	S	0	0	0	0	0	0	0	0	0	3	1	4	0	0	0	1	4		
T	O	J	S	0	0	0	0	0	0	0	0	0	3	1	7	0	0	0	0	2		
T	O	J	S	0	0	0	0	0	0	0	0	0	3	1	7	0	0	0	0	4		
T	O	J	S	0	0	0	0	0	0	0	0	0	3	1	7	0	0	0	0	0		

Annexure B

Registered Owner	Title Deed Number	Property Name	Portion Description	Province	Reg.Div.	Decimal Share held in respect of the Property
Ingwe Surface Holdings Ltd	Title Deed No: T137060/99	BANKFONTEIN 340	PORTION 25	Mpumalanga	JS	0.84
Tavistock Collieries (Pty) Limited	Title Deed No: T137060/99	BANKFONTEIN 340	PORTION 25	Mpumalanga	JS	0.16
Ingwe Surface Holdings Ltd	Title Deed No: T76564/1999	BANKFONTEIN 340	REMAINING EXTENT OF PORTION 4 (PTN OF PTN 1)	Mpumalanga	JS	0.6
Tavistock Collieries (Pty) Limited	Title Deed No: T89166/1992	BANKFONTEIN 340	REMAINING EXTENT OF PORTION 4 (PTN OF PTN 1)	Mpumalanga	JS	0.6
Tavistock Collieries (Pty) Limited	Title Deed No: T141788/98	GOEDEHOOP 315	REMAINING EXTENT OF PORTION 1	Mpumalanga	JS	1
Tavistock Collieries (Pty) Limited	Title Deed No: T18663/1999	GOEDEHOOP 315	REMAINING EXTENT OF PORTION 5 (PTN OF PTN 3)	Mpumalanga	JS	0.16
Ingwe Surface Holdings Ltd	Title Deed No: T18663/1999	GOEDEHOOP 315	REMAINING EXTENT OF PORTION 5 (PTN OF PTN 3)	Mpumalanga	JS	0.84
Ingwe Surface Holdings Ltd	Title Deed No: T76588/99	GOEDEHOOP 315	REMAINING EXTENT OF PORTION 9	Mpumalanga	JS	0.6
Tavistock Collieries (Pty) Limited	Title Deed No: T63007/1992	GOEDEHOOP 315	REMAINING EXTENT OF PORTION 9	Mpumalanga	JS	0.4
Ingwe Surface Holdings Ltd	Title Deed No: T18663/1999	GOEDEHOOP 315	REMAINING EXTENT OF PORTION 35	Mpumalanga	JS	0.84
Tavistock Collieries (Pty) Limited	Title Deed No: T18663/1999	GOEDEHOOP 315	REMAINING EXTENT OF PORTION 35	Mpumalanga	JS	0.16
A.J.Visser	T3820/1970	GOEDEHOOP 315	PORTION 14	Mpumalanga	JS	1

Registered Owner	Title Deed Number	Property Name	Portion Description	Province	Reg.Div.	Share Decimal
Ingwe Surface Holdings Ltd	Title Deed No: T76564/1999	HARTBEESTFONTEIN 339	PORTION 6 (PTN OF PTN 1)	Mpumalanga	JS	0.6
Tavistock Collieries (Pty) Limited	Title Deed No: T89166/1992	HARTBEESTFONTEIN 339	PORTION 6 (PTN OF PTN 1)	Mpumalanga	JS	0.4
Ingwe Surface Holdings Ltd	Title Deed No: T76564/1999	HARTBEESTFONTEIN 339	PORTION 8	Mpumalanga	JS	0.6
Tavistock Collieries (Pty) Limited	unknown	HARTBEESTFONTEIN 339	PORTION 8	Mpumalanga	JS	0.4
Ingwe Surface Holdings Ltd	Title Deed No: T76564/1999	HARTBEESTFONTEIN 339	PORTION 9	Mpumalanga	JS	0.6
Tavistock Collieries (Pty) Limited	Title Deed No: T89166/1992	HARTBEESTFONTEIN 339	PORTION 9	Mpumalanga	JS	0.4
Ingwe Surface Holdings Ltd	Title Deed No: T76564/1999	HARTBEESTFONTEIN 339	REMAINING EXTENT OF PORTION 10	Mpumalanga	JS	0.6
Ingwe Surface Holdings Ltd	unknown	HARTBEESTFONTEIN 339	REMAINING EXTENT OF PORTION 10	Mpumalanga	JS	0.4
Ingwe Surface Holdings Ltd	Title Deed No: T18663/1999	RIETFONTEIN 314	REMAINING EXTENT OF PORTION 4 (PTN OF PTN 3)	Mpumalanga	JS	0.84
Ingwe Surface Holdings Ltd	Title Deed No: T59244/2005	RIETFONTEIN 314	REMAINING EXTENT OF PORTION 14	Mpumalanga	JS	1
Ingwe Surface Holdings Ltd	Title Deed No: T52916/2001	RONDEBOSCHJE 468	PORTION 1	Mpumalanga	JS	0.6
Tavistock Collieries (Pty) Limited	Title Deed No: T48409/1993	RONDEBOSCHJE 468	PORTION 1	Mpumalanga	JS	0.4
Ingwe Surface Holdings Ltd	Title Deed No: T52917/2001	STERKWATER 317	PORTION 4 (PTN OF PTN 2)	Mpumalanga	JS	0.6
Tavistock Collieries (Pty) Limited	Title Deed No: T52917/2001	STERKWATER 317	PORTION 4 (PTN OF PTN 2)	Mpumalanga	JS	0.4
Tavistock Collieries (Pty) Limited	Title Deed No: T141787/1998	STERKWATER 317	REMAINING EXTENT	Mpumalanga	JS	1

Landowner:
Contact person:
Postal address:
Postal code:
Telephone:
E-mail:

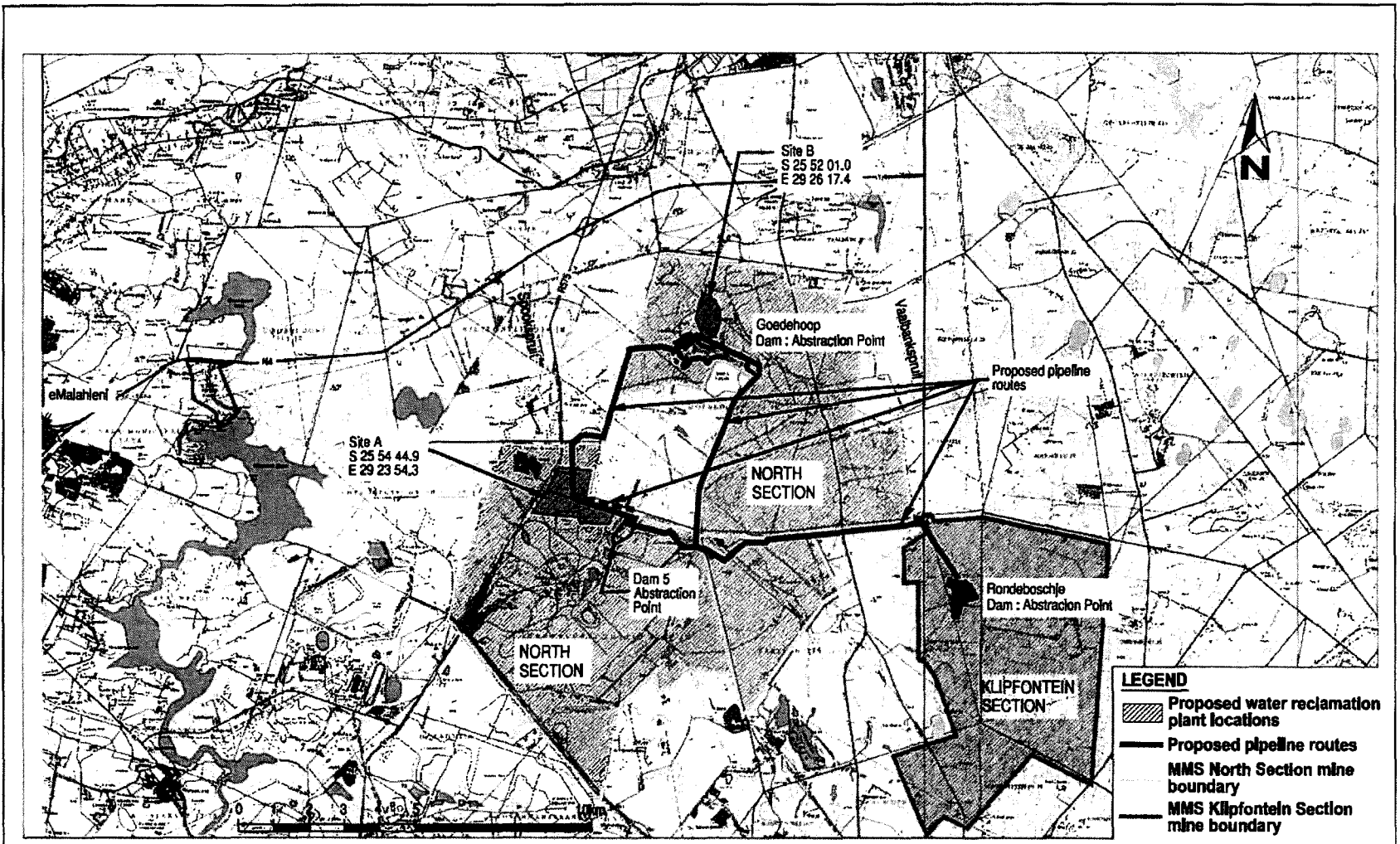
INGWE SURFACE HOLDINGS LIMITED		
Vikesh Dhanooklal		
P. O. BOX 61075 MARSHALLTOWN		
2107	Cell:	082 333 6500
011 376-2410	Fax:	011 376-2160
Vikesh.dhanooklal@bhpbilliton.com		
TAVISTOCK COLLIERIES (PTY) LIMITED		

Landowner:
Contact person:
Postal address:
Postal code:
Telephone:
E-mail:

Barry Fourie		
1 ST FLOOR, MELROSE BOULEVARD, MELROSE ARCH, MELROSE		
2196	Cell:	082 320 3486
011 772-0600	Fax:	011 772-0698
bfourie@xstratacoal.co.za		

Landowner:
Contact person:
Postal address:
Postal code:
Telephone:
E-mail:

A.J. VISSER c/o MUHANGA MINING		
Hento Deale		
P.O. BOX 1070, MIDDELBURG		
1050	Cell:	0824176866
013 243-2225	Fax:	013 282-6099 / 9013
hento@telkomsa.net		



2528 Pretoria

Jones & Wagener
 Consulting Civil Engineers
 Tel. (011) 319-0200
 Fax. (011) 319-0201
 e-mail jw@joneswagener.co.za

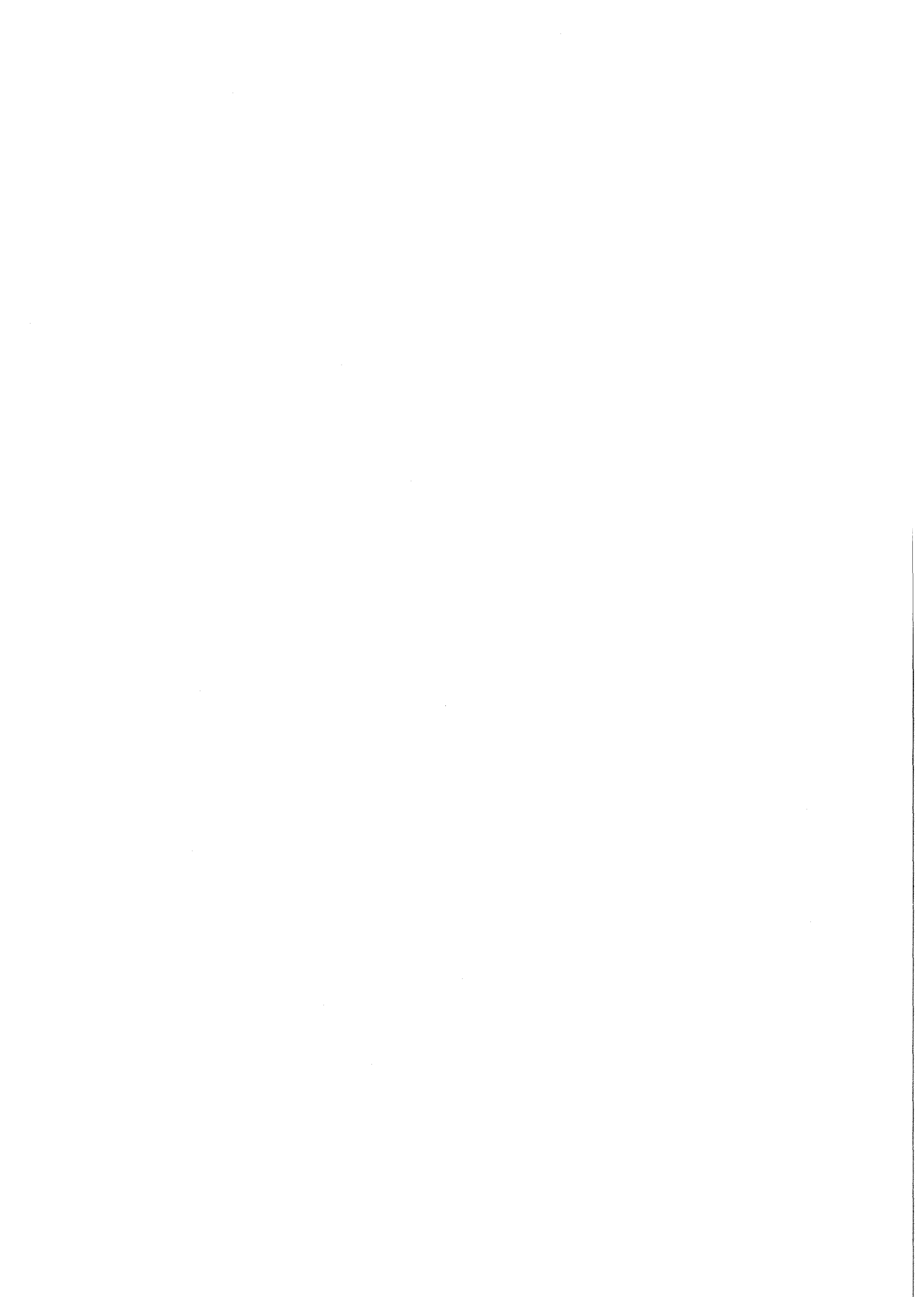
29 Brook Road
 P.O. Box 1424
 Midrand 2129

MIDDELBURG WATER RECLAMATION PROJECT
 Regional Locality Plan Indicating alternative Water Treatment Sites A and B,
 as well as proposed pipeline routes.

Figure 1
 Job No B478

Figure 1

A.2 EIA Application Form – Letter from MDEDET



MPUMALANGA PROVINCIAL GOVERNMENT

Cnr Botha & Northey Str
Pavilion Building
Next to Boston College
WITBANK
1035
E-mail: himavodze@wit.mpu.gov.za



P.O Box 383
WITBANK
1035
Tel: (013) 690 2595
International Tel: +27 13 690 2595
Fax: (013) 690 3704
International Fax: +27 13 690 3704

Department of Economic Development, Environment and Tourism

Litiko letekutfutukiswa kwemnotfo
nekuhlelwa

UmNyango wezokuthuthukiswa
komnotho nezokufanywa

Department Ekonomieseontwikkeling en
beplanning

Enquiries: Hlamarisa Mavodze

Att: Marius van Zyl
Jones & Wagener Consulting Civil Engineers
P.O Box 1434
Rivonia
2128

Fax No: 011 519 0201
Tel No: 011 519 0217

Dear Sir/Madam

Application for Environmental Authorization for the proposed Middleburg water reclamation Project

We confirm having received the abovementioned application for Environmental Authorisation on 19 January 2011.

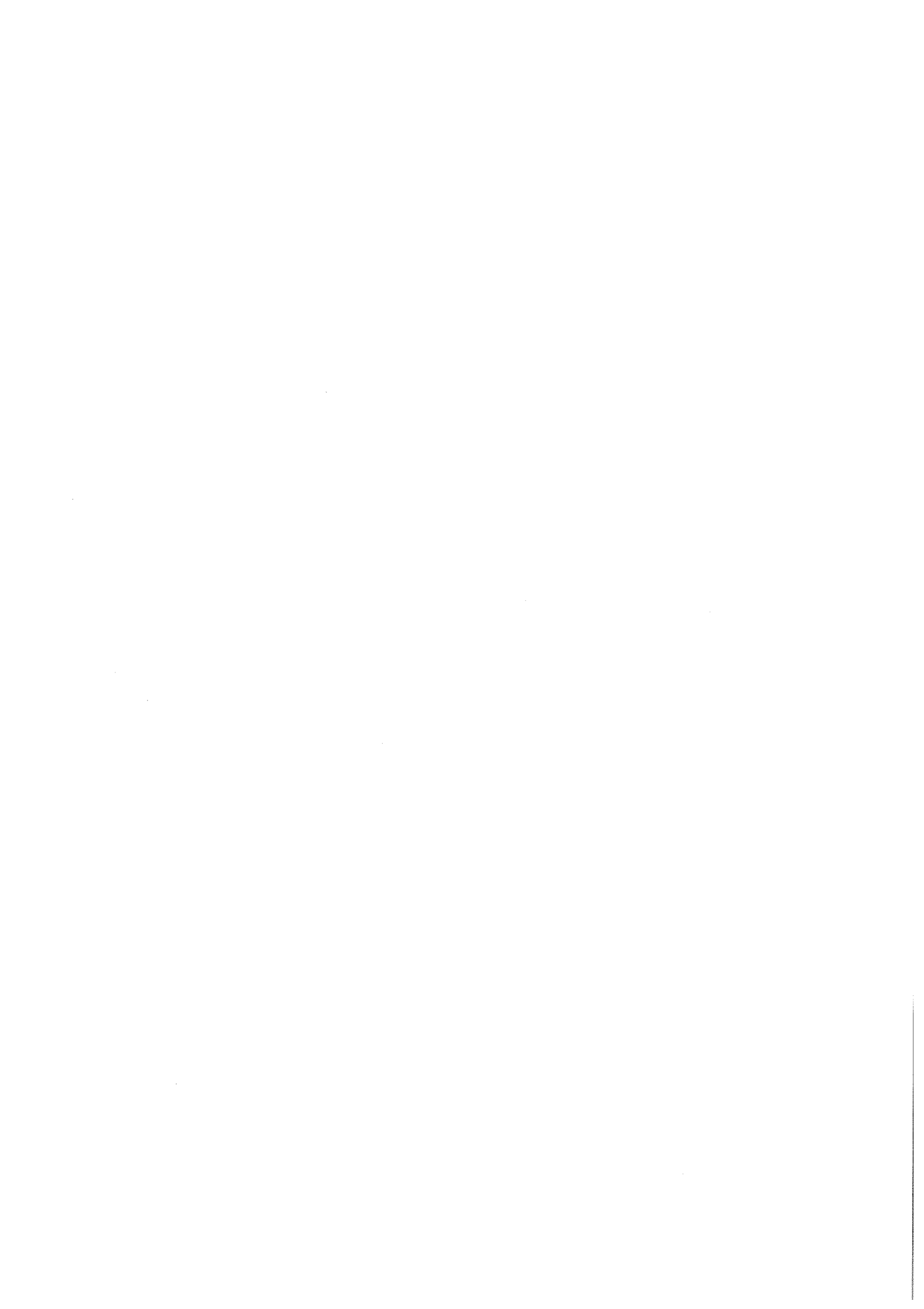
Kindly quote the following reference number in future correspondence in respect of the application, 17/2/3 N-28. The responsible officer is Hlamarisa Mavodze and all correspondence must be directed to: The Director, Environmental Impact Management marked for the attention of the responsible officer.

Please draw the applicant's attention to the fact that the activity may not commence prior to an Environmental Authorisation being granted by the Department.

Yours faithfully,


Ms D Tswai
Deputy Director
Environmental Impact Management

DATE: 2011/04/06



A.3 License Application Form – Letter from DEA





environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

053685

Private Bag X 447, PRETORIA, 0001- Fedsure Building, 315 Pretorius Street, PRETORIA

Ref No.: 12/9/11/L492/6

Enquiries: Mr M Phaladi/ Mr L Mahlangu

Tel: (012) 310 3870/3536 Fax: (012) 310 3753

Email: mphaladi@environment.gov.za/lmahlangu@environment.gov.za

Jones & Wagener (Pty) Ltd
P. O-Box 1434
Rivonia
2128

Fax No. (011) 519 0201

Attention: Marius van Zyl.

APPLICATION FOR A WASTE MANAGEMENT LICENCE IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (NO. 59 OF 2008): FOR THE BHP BILLITON ENERGY COAL FOR THE MIDDLEBURG WATER RECLAMATION PROJECT.

The Department confirms having received the above-mentioned waste management licence application forms for the abovementioned activity on 01 December 2010.

You are hereby reminded to comply with the requirements **Regulations 67 of GN No. R 543** with regard to the period allowed for complying with the requirements of the regulations, and **Regulations 56 and 57 of GN No. R 543** with regard to the allowance of a commenting period for interested and affected parties on all reports submitted.

Your application has been assigned with a reference number (12/9/11/L492/6). Kindly quote this reference number in any future correspondence in respect of your application. The responsible officer for the processing of your application is Mr Phaladi who can be contacted on (012) 310 3870.

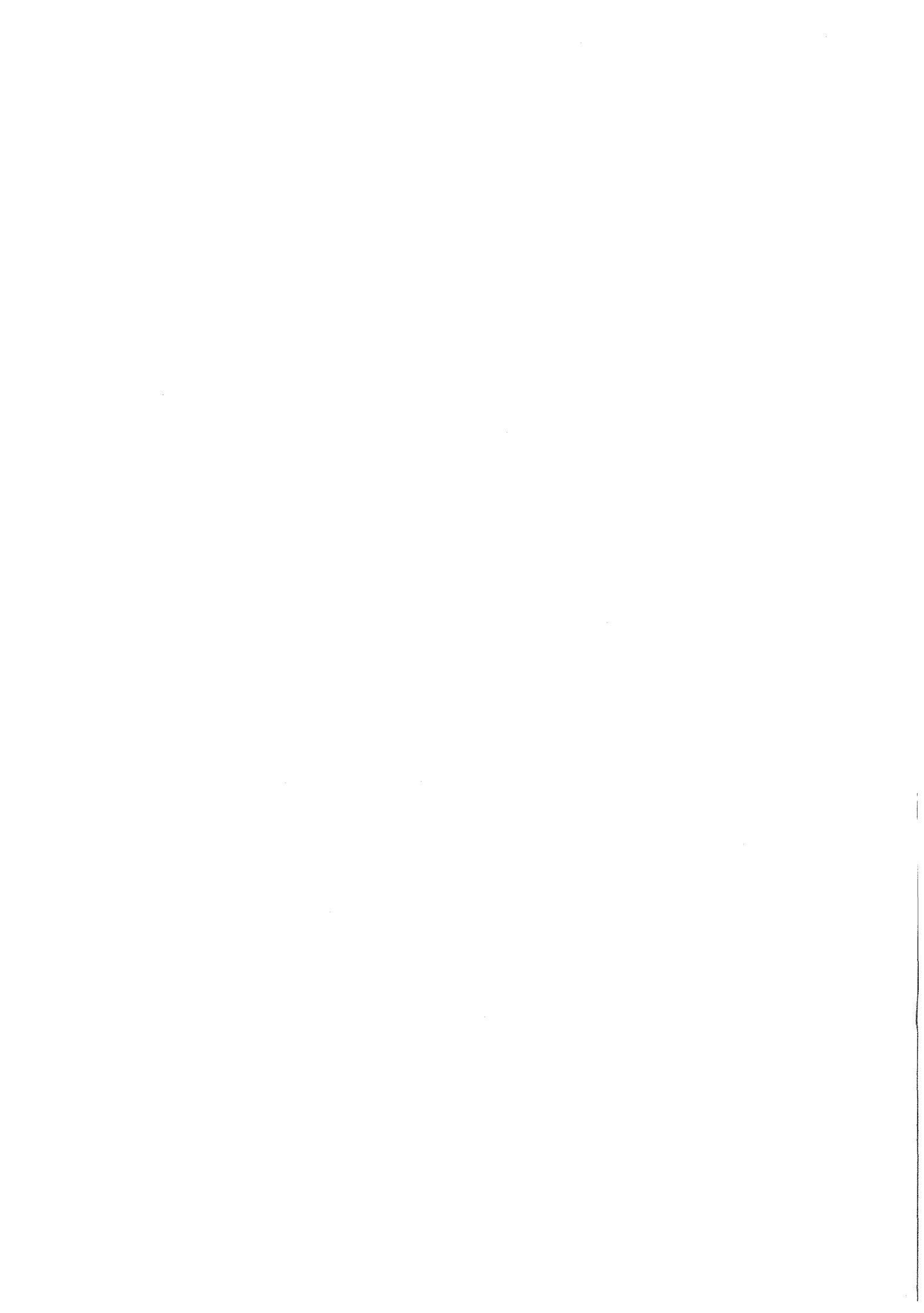
Please draw the applicant's attention to the fact that the activity may not commence prior to a waste management licence being granted by the Department.

Should you require further detailed information, please do not hesitate to contact this office.

Yours sincerely

Ms Joanne Yawitch
Deputy Director-General
Environmental Quality and Protection
Letter signed by: Mr Lucas Mahlangu
Designation: Deputy Director: Systems
Date: 2010/12/08

Cc: Stive Brown: (013) 689 3085.



A.4 Minutes from Meetings



Jones & Wagener

Consulting Civil Engineers

59 Bevan Road PO Box 1434 Rivonia 2128 South Africa
Tel: (011) 519-0200 Fax: (011) 519-0201 Email: post@jaws.co.za

MINUTES

DESCRIPTION	Pre-registration meeting with Mpumalanga Department of Economic Development, Environment and Tourism for Middelburg Water Reclamation Project	JOB NO.	B478
FILE NAME	B478_MWR_DPS_Final_Minutes_MDEDETmeeting_25Aug2010.doc	DATE	25 August 2010

Present:

Name:	Company:	Contact no.:	Email
Steve Brown (SB)	BECSA (Project Director)	082 460 1962	steve.brown@bhpbilliton.com
Wendy Mey (WW)	BECSA (Process Manager)	013 689 3051 / 082 564 5958	wendy.mey@bhpbilliton.com
Lindie Moore (LM)	BECSA (Env. Specialist)	013 689 3051 / 079 694 6907	lindie.moore@bhpbilliton.com
Andrew Modise (AM)	BECSA (Communications Manager)	011 376 2166 / 079 520 3040	andrew.modise@bhpbilliton.com
Michelle Williams (MW)	BECSA (Project Leader DMO External)	082 372 0739	michelle.williams@bhpbilliton.com
Vicki Shaw (VS)	XCSA (Env. Specialist)	013 653 5457 / 084 205 6287	vshaw@xstratacoal.co.za
Fikile Theledi (FT)	DEDET (Director: Pollution waste Management)	013 759 4100 / 079 189 5599	mtheledi@mpg.gov.za
Garth Batchelar (GB)	DEDET (Director: Environment Impact Management)	013 759 4099 / 082 771 7998	gbatchelar@mpg.gov.za
Marius van Zyl (MvZ)	Jones & Wagener (Env. Process Project Manager)	011 519 0200 / 082 880 1250	vanzyl@jaws.co.za
Beth Candy (BC)	Jones & Wagener (Env. Consultant)	011 519 0200 / 082 330 1479	candy@jaws.co.za

Issues/concerns/updates:

Item	Minutes	Action
1.	Welcome and introductions	
1.1	SB welcomed everyone to the meeting and introduced the Middelburg Water Reclamation Project (MWRP). He started off by highlighting that the project will be a joint venture between BHP Billiton Energy Coal South Africa Limited (BECSA) and Xstrata Coal South Africa (Pty) Limited (XCSA), as water liabilities are shared by these parties with regard to Middelburg Mines in terms of the Douglas Tavistock Joint Venture, as amended (DTJV).	
1.2	SB indicated the possible locations of the proposed MWRP – see attached Power Point presentation.	
1.3	WM stated that the project will be located in the Upper Olifants River catchment, within the Steve Tshwete Local Municipality. The proposed project is within the quaternary sub-catchment B11H and B12D and is within Water Management Unit 26.	
2.	Project description	

2.1	WM outlined that the proposed project consists of a collection system, where impacted mine water is transferred to the proposed water reclamation plant site. Water will be pumped from MMS Hartbeesfontein, Goedehoop and Klipfontein Sections. The plant will also require the construction of gypsum waste disposal facilities. WM mention that the proposed water treatment plant will treat the excess mine water to acceptable standards, and it is proposed that the treated water will be released into the Spookspruit.	
2.3	It was further discussed that the project will be developed in two phases, with an initial plant treatment capacity of 15 Ml/day, increasing to 30 Ml/day when required. WM indicated that the mine currently re-uses contaminated water as part of their processes. However when the mine closes the re-use will be terminated thereby resulting in increased volumes of impacted mine water to be treated.	
2.4	WM introduced the treatment process in a flow diagram that illustrated total dissolved solids (TDS) and heavy metals removal, and the generation of gypsum waste during the treatment process. WM mentioned that the treatment process will be a compilation of precipitation, ultra-filtration and membrane technology, similar to that of the eMalaheni and Optimum water reclamation plants. The differences, however, are that the chemistry of the water has significant lower sodium and chloride concentrations, and therefore brine will not be generated.	
2.5	WM pointed out that if, the plant for some reason experiences problems, the impacted water can be taken back to the mine water management facilities.	
2.6	GB pointed out that a research project is currently underway at Optimum with regards to alternative uses of the gypsum. Before alternative uses and applications have not been approved, the gypsum waste streams will be stockpiled in waste management facilities at the proposed MWRP.	
2.7	WM mentioned that it is proposed to provide capacity to store waste for at least 5 years, however it would be preferred that alternative waste management options are investigated.	
2.8	MvZ stated that the water qualities for the MWRP are very different to Optimum and therefore the gypsum cake could potentially delist to general waste.	
2.9	WM highlighted that the layout of the MWRP plant will be similar to the eMalaheni plant, however, there is no need for: <ul style="list-style-type: none"> • Clean water reservoirs as the treated water is to be discharged, and • Brine waste management facility, as brine will not be generated due to the quality of the impacted mine water. 	
2.10	<i>FT enquired if the contaminated mine water will be treated to drinking water standards.</i>	
2.11	MW confirmed that the water will be treated to drinking water standard and the Department of Water Affairs' receiving water quality requirements for the Spookspruit.	
2.12	FT suggested that inputs from the Department of Water Affairs (DWA) and I&APs are required, as it may have an influence on the water quality requirements. It was stated that meetings with the DWA and I&APs will be held.	
2.13	<i>GB enquired what the extent of the mining is at MMS.</i>	
2.14	SB clarified that the MMS covers approximately 25 km ² . There are currently no underground mining activities within the MMS mining operations.	
2.15	GB highlighted that the land has been sterilised, which could influence future land use of the rehabilitated mine area.	

2.16	<i>FT mentioned that the treatment plant operations should tie in with the mine closure and decommission plans. All agreed that this will be the case.</i>	<i>Address these in the EIA</i>
2.17	WM said that MMS covers a large area and therefore significant volumes of excess impacted mine water is generated even though MMS strives to optimize the use and re-use of impacted mine water. Mine rehabilitation is also occurring, which minimizes the generation of impacted water. However, surplus water is generated and this is expected to increase with time as the life of mine is another 20 to 25 years. As a result the MWRP will have an initial capacity of 15 Ml/day, but will increase to 30 Ml/day when the need arises.	
2.18	<i>GB enquired who would take over the management of the plant once the mining has been decommissioned.</i>	
2.19	SB clarified that the DTJV will remain liable for the impacted mine water and therefore will continue treating water post closure of the mine.	
2.20	MvZ further mentioned that it would be possible for an external company to take over the management of the treatment plant, and as a result the application for the MWRP will be made separate to the environmental authorisations of the mining operations.	
2.21	MvZ recommended that the treated water released from the plant be aerated. He also commented that the discharged water will be within drinking water standards.	
3.	Environmental Authorisation Process	
3.1	MvZ mentioned that the existing IWULA for MMS North Section and Klipfontein Section, as well as EMPR's would need to be updated to include the water reclamation activities. As it is proposed to operate the MWRP as a separate entity, a separate Integrated Water Use Licence (IWUL) will be applied for purely for the treatment plant activities.	
3.2	MvZ stated that, in order to obtain the required environmental authorisation, the project will be registered in terms of the new EIA Regulations, which became effective on 2 August 2010.	
3.3	<i>MvZ enquire who will be the contact person from MDEDET.</i>	
3.4	GB clarified that the communication for the MWRP project will need to go through the regional office in Emalahleni, and that the details of the contact person will be forwarded to the MWRP environmental team.	Obtain MDEDET responsible person contact details
3.5	<i>MvZ enquired if any environmental management framework is available for the project area.</i>	
3.6	GB confirmed that the environmental management framework for the MWRP project area has not yet been promulgated, and therefore the Conservation Plan should be used. GB offered to distribute a copy of the conservation plan to the MWRP environmental team.	Use Mpumalanga Conservation Plan for biodiversity studies
3.7	MvZ highlighted that the water use license requirements overlaps significantly with the National Environmental Management: Waste Act (NEM:WA) waste management facility licensing requirements. He also stated that the project needs to be registered as a Water Care Works in terms of provisions of the National Water Act.	
3.8	<i>MvZ queried that as there will be an overlap with the National Water Act and NEM:WA, resulting in duplication of licensing, could the project team motivate for an application for exemption from NEM:WA requirements.</i>	
3.9	FT mentioned that he would need to confirm with National if an application for exemption from NEM:WA requirements can be applied for. He, however, stated that NEM:WA looks at the whole project, while the NWA only looks at the water environment. He also mentioned that waste management licences take the water environment into consideration, and therefore the DWA issues a ROD after approval of the waste management facility licence application. DWA would	FT to discuss NEM:WA licence issues with DEA

	comment on the waste license where as Environmental Affairs Regional Offices would not comment on the water license application. FT suggested that the waste management facility license application should be reviewed by DWA.	
3.10	MvZ concluded that in order to prevent the process from being delayed, a waste management facility license will be applied for, as apposed to an Application for Exemption from NEM:WA.	Apply for NEM:WA licences
3.11	GB recommended that there should be interaction between the two Departments.	
3.12	<i>The MWRP will include both general and hazardous waste and therefore MvZ enquired who would be the competent authority.</i>	
3.13	FT and GB confirmed that they would follow up with the National Department of Environmental Affairs (the DEA).	FT to discuss licensing issues with DEA
3.14	MvZ mentioned that a number of specialist studies have already been undertaken for alternatives locations of the MWRP and pipeline route alternatives.	
3.15	GB mentioned that the project may need to be registered with the DEA, as the EIA process would include waste issues and applications.	Register project with the DEA as well
4.	Discussion and way forward	
4.1	MvZ stated that the timeframes of the project are quite tight, due to the urgency of the water reclamation plant, and therefore there will be regular follow-ups with the authorities.	
4.2	GB mentioned that, for both the eMalahleni and Optimum water reclamation projects, joint authorities meeting were held, which were very effective.	
4.3	All present agreed that authorities meetings would be organised at specific milestones during the project.	Joint authority meetings to be held at specific milestones
4.4	<i>GB enquired if any of the surrounding mines will be included in the MWRP.</i>	
4.5	SB stated that AngloCoal's Bank Colliery have expressed an interest in the project. Pumping costs are, however, a limiting factor due to the watershed separating some of the surrounding mining operations. SB further mentioned it would in the long term be more sustainable to have a larger plant and therefore highlighting the need to position the plant in a strategic location. It was also mentioned that the project team was not aware of any other projects in the area.	
4.6	MvZ confirmed that a review of alternatives will be included in the Scoping Phase, together with the identification and motivation of the preferred site. The preferred site will then be taken forward in the impact assessment phase of the EIA.	Include site evaluation in scoping report
4.7	GB confirmed that this approach is acceptable.	
4.8	FT suggested that alternative management options for the gypsum waste, as well as waste minimisation should also be addressed. This should include waste re-use, disposal alternatives and delisting of waste.	Consider alternative gypsum waste management options in the EIA
5.	Closure	
5.1	SB concluded the meeting by thanking all present for attending and invited all present on a site visit.	
5.2	Both potential locations of the MWRP were visited during the site visit.	

Date 11 October 2010

Minuted by: Beth Candy

Document source:

C:\Alljobs\B478 Water Treatment Plant\Meetings\MDEDET meeting\B478_MWR_DPS_Final_Minutes_MDEDETmeeting_25Aug2010.doc



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Consulting Civil Engineers

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Tel: (011) 519-0200 Fax: (011) 519-0201 Email: post@jaws.co.za

MINUTES

DESCRIPTION	Pre-registration meeting with Mpumalanga Department of Water Affairs	JOB No.	B478
FILE NAME	B478_MWR_DPS_FinalMinutes_DWAmeeing_3Sep2010.doc	DATE	3 September 2010

Present:

Name:	Company & Designation:	Contact no.:	Email
S Brown (SB)	BECSA (Project Director)	082 460 1962	steve.brown@bhpbilliton.com
L Moore (LM)	BECSA (Env. Specialist)	013 689 3051 / 079 694 6907	lindie.moore@bhpbilliton.com
A Modise (AM)	BECSA (Communications Manager)	011 376 2166 / 079 520 3040	andrew.modise@bhpbilliton.com
V Shaw (VS)	XCSA (Env. Specialist)	013 653 5457 / 084 205 6287	vshaw@xstratacoal.co.za
S Macevele (SM)	DWA (Deputy Director)	013 932 2061 / 078 460 3439	maceveles@dwa.gov.za
M Moloto (MMo)	DWA (ASD)	013 932 2061 / 082 887 4332	molotom@dwa.gov.za
K Meso (KM)	DWA (PT)	013 932 2061 / 078 146 8055	mesok@dwa.gov.za
M Mashaba (MMA)	DWA (WPCO)	013 932 2061 / 073 688 7059	mashabaa@dwa.gov.za
M van Zyl (MvZ)	Jones & Wagener (J&W) (Env. Process Project Manager)	011 519 0200 / 082 880 1250	vanzyl@jaws.co.za
B Candy (BC)	J&W (Env. Consultant)	011 519 0200 / 082 330 1479	candy@jaws.co.za

Issues/concerns/updates:

Item	Minutes	Actions
1.	Welcome and introductions	
1.1	SB welcomed everyone to the meeting and introduced the Middelburg Water Reclamation Project (MWRP). He started off by highlighting that the project will be a joint venture between BHP Billiton Energy Coal South Africa Limited (BECSA) and Xstrata Coal South Africa (Pty) Limited (XCSA), as water liabilities are shared by these parties with regard to Middelburg Mines (MMS) in terms of the Douglas Tavistock Joint Venture, as amended (DTJV). The objective of the MWRP is to treat excess mine water to acceptable standards. The treated mine water will be released into the Spookspruit catchment.	
1.2	SB indicated the location of the proposed MWRP – see attached power point presentation.	
1.3	SB stated that the project will be located in the Upper Olifants River catchment, within the Steve Tshwete Local Municipality's area of	

Item	Minutes	Actions
	jurisdiction. The proposed project is within the quaternary sub-catchment B11H and B12D and is within the Water Management Unit 26.	
2.	Project description	
2.1	SB outlined that the proposed project will consist of a pipeline collection system, where contaminated mine water is transferred to the proposed water reclamation plant site from the various water storage facilities. Water is pumped from both Middelburg Mine Services (MMS) North and Klipfontein Sections. The water is then treated in a reverse osmosis plant. The plant will also require the construction of gypsum waste disposal facilities. SB said that the project will be similar to that of the eMalahleni water reclamation project. However due to the water qualities at MMS no brine pond will be required.	
2.2	It was further discussed that the project will be developed in two phases, with the initial plant treatment capacity being 15M ³ /day, increasing to 30M ³ /day when required. MvZ indicated that the mine currently re-uses contaminated water as part of the coal washing processes. When the mine closes re-use will no longer occur resulting in increased volumes of impacted mine water. The MWRP is therefore likely to operate post closure.	
2.3	SB introduced the treatment process in a flow diagram that illustrated TDS and heavy metals removal and the generation of waste during the treatment process. SB mentioned that the treatment process will be a combination of precipitation, filtration and membrane technology, similar to the eMalahleni and Optimum water reclamation projects. The difference, however, is that the impacted water has lower sodium and chloride and therefore brine will not be generated.	
2.4	SB discussed the different types of waste that will be produced during the treatment process and mentioned that the last phase of the treatment phase produces process water, which can be either used in the coal washing plant or blended with the treated water. Blending will not result in the treated water exceeding the treated water quality requirements.	
2.5	SM asked what will happen with the process water when the mine is no longer operational.	
2.6	SB clarified that the MMS operations still has a further 25 years life of mine, during which time technology is advancing, and as a result it is anticipated that eventually no process water will be produced during the reclamation process.	
2.7	SB stated that an initial storage area for gypsum has been provided for. It is believed that there will be a market for the gypsum in the long term. If the sale of gypsum does not prove to be feasible then the gypsum storage area can be extended.	
2.8	SM voiced concerns that water reclamation plants appear to be mushrooming in South Africa, and therefore planning is required for the construction of regional plants. SM enquired if there is sufficient space available on the reclamation plant site to expand to include other companies, therefore consolidating treatment to a catchment area.	
2.9	SB confirmed that there is sufficient land available to extend the site significantly. The proposed location is also at the lower part of the mining operations within the Spookspruit catchment.	
2.10	SM suggested that the licence conditions should allow the MWRP to, in future, make the facility available to other companies.	J&W to address in EIA and IWWMP
2.11	MvZ stated that this is one of the reasons why the MWR project team has decided to ring fence the project as a separate JV.	
2.12	MvZ mentioned that the water reclamation plant will treat the impacted water to meet the interim catchment water quality criteria recently updated by Golder on behalf of the Dept of Water Affairs.	
2.13	SM highlighted that there are still gaps in the updated water quality guidelines, as the impacts on the water users in the catchment has not	

Item	Minutes	Actions
	been sufficiently addressed. The Spookspruit water qualities are very poor, and the downstream users have not yet been consulted on the new interim water quality objectives. SM mentioned that Water Affairs is looking at further improving the water quality objectives in order to improve water quality for downstream users. However, the guidelines need to be viable to large companies.	
2.14	SM also pointed out that the catchment has pressures with regards to the supply of potable water and that this demand is expected to increase significantly.	
2.15	SB mentioned that in the long term the MWRP could investigate supplying potable water to other water users in the catchment, however in the short term the construction and operation of the plant is urgent. In order to avoid delays, the objective is to release treated water to the environment.	
2.16	SM suggested that the MWR project team investigate supplying power stations within the catchment, as they are current pumping water long distances from the Vaal River catchment. There is currently a high demand for potable water in the catchment.	
2.19	MMo asked if MMS will still have water available to supply Duvha Power Station, as outlined in the water use licence.	
2.20	LM clarified that currently Duvha Power Station is supplied by MMS South Section, where as the MWRP will only receive water from North Section and Klipfontein Sections, and therefore the supply of water to the Power Station will not be affected.	
2.21	MvZ pointed out that water from MMS was used in the pilot plant at eMalahleni in order to determine the likely quality of the gypsum waste that will be produced. A waste classification was then undertaken of the gypsum waste produced in order to determine the liner requirements for the storage areas of the gypsum wastes.	
3.	Environmental Authorisation process	
3.1	MvZ mentioned that the waste disposal facilities will need to be licence under the provisions of the NEM:WA Category B:4(2) as well as the provisions of the NWA.	
3.2	SM confirmed that there is a huge amount of duplication in legal requirements. He said that Government is investigating dispensing with duplications. He also said that the MWRP designs will have to be approved by the DWA.	
3.3	MvZ pointed out that the MWRP will also be required to register as a Water Care Works.	
3.4	SM mentioned that it might not be necessary to apply for an amendment of the North Section and Klipfontein Section IWULs. He suggested that the Section 21(a) applications for abstraction from the pollution control dams be included as part of the MWRP IWULA. It was also discussed that the payment for the use of water is separate to the licencing of the use, and the charge is based on the size of the footprint of the water use rather than volumes.	J&W to take note
3.5	SM stated that the Section 21(c) and (i) applications may result in time delays during the compilation of the wetland reserve determination. He mentioned that the MWRP environmental project team could minimise delays in the approval process by assisting in the determination of the Present Ecological Status (PES) and Functions and Ecological Importance and Sensitivity (EIS) of the wetlands impacted on.	J&W to discuss this with biodiversity specialist and then approach the DWA
3.6	SM also mentioned that, as this is a high priority project, the Minister can fast tract the decision for the application for exemption from the provisions of the NEM:WA . He also suggested that, as there is an overlap in licencing processes, high level discussions should be held between the DWA and DEA Head Offices in order to fast tract the approval process.	
3.7	SM highlighted that the construction of the Section 21(c) and (i) activities	J&W take note of

Item	Minutes	Actions
	cannot commence until the licence is granted, which again is dependent on the reserve determination by RDM. He suggested that the consultants fast track the reserve determination process.	reserve determination
3.8	MvZ confirmed that the EIA for the MWRP will be submitted to the MDEDET, DEA and DWA for approval.	J&W
3.9	MM and SM stated that public participation is required during the water use licence process.	
3.10	MvZ confirmed that a PP process will be undertaken during the EIA and Water Use Licence process.	
3.11	MvZ highlighted that integrated authorities meetings will be held at key milestones during the project.	J&W to arrange
3.12	SM mentioned that all communication with regards to the MWRP project should go through MMs.	
4.	Discussion and way forward	
4.1	MvZ stated that the timeframes of the project are quite tight, due to the urgency of the water reclamation plant, and therefore there will be regular follow-ups with the authorities.	
4.2	All present agreed that authorities meetings would be organised at specific milestone during the project.	
5.	Closure	
5.1	SB concluded the meeting by thanking all present for attending and invited all present on a site visit.	

Date 13 October 2010

Minuted by: Beth Candy

Document source:

C:\Alljobs\B478 Water Treatment Plant\Meetings\DWA Meeting\B478_MWR_DPS_FinalMinutes_DWAmeeting_3Sep2010.doc



Jones & Wagener

Consulting Civil Engineers

59 Bevan Road PO Box 1434 Rivonia 2128 South Africa
Tel: (011) 519-0200 Fax: (011) 519-0201 Email: post@jaws.co.za

MINUTES

DESCRIPTION	Pre-registration meeting with the Department of Mineral Resources (DMR) for Middelburg Water Reclamation Project	JOB NO.	B478
FILE NAME	B478_Kdj_MWRP_DMRmeeting_Minutes_25October2010.doc	DATE	22 October 2010

Present:

Name:	Company:	Contact no.:	Email
Steve Brown (SB)	BECSA (Senior Manager Project Delivery)	082 468 1967	steve.brown@bhpbilliton.com
Wendy Mey (WW)	BECSA (Process Manager)	013 689 3051 / 082 564 5958	wendy.mey@bhpbilliton.com
Lindie Moore (LM)	BECSA (Environmental Specialist)	013 689 3051 / 079 694 6907	lindie.moore@bhpbilliton.com
Andrew Modise (AM)	BECSA (Communications Manager)	011 376 2166 / 079 903 4342	andrew.modise@bhpbilliton.com
Michelle Williams (MW)	BECSA (External Relations)	082 372 0739	michelle.williams@bhpbilliton.com
Mashudu Mutengwe (MM)	DMR (Assistant Director)	013 656 1448	mashudu.mutengwe@dmr.gov.za
Sonia Chipu (SC)	DMR (Environmental Officer)	013 656 1448	sonia.chipu@dmr.gov.za
Marius van Zyl (MvZ)	Jones & Wagener (Environmental Process Project Manager)	011 519 0200 / 082 880 1250	vanzyl@jaws.co.za
Katherine de Jong (KdJ)	Jones & Wagener (Environmental Consultant)	011 519 0200 / 082 805 9989	katherine@jaws.co.za

Issues/concerns/updates:

Item	Minutes	Action
1.	Welcome and introductions	
1.1	SB welcomed everyone to the meeting and introduced the Middelburg Water Reclamation Project (MWRP). He said that the meeting would give an overview of the Douglas Tavistock Joint Venture (DTJV) feasibility study to establish a mine water reclamation scheme on Middelburg Mine (now known as Middelburg Colliery).	
2.	Project Introduction	
2.1	SB outlined that the proposed project would be undertaken by the DTJV, which is a joint venture between BHP Billiton Energy Coal South Africa Limited (BECSA) and Tavistock Collieries (Pty) Limited. At Middelburg Mines North and Klipfontein Sections, Tavistock Collieries is responsible for 16% of the impacted mine water to be treated and BECSA 84%. The MWRP will be situated in the Upper Olifants River catchment, within the Steve Tshwete Local Municipality and it will treat excess mine water produced at	

	Middelburg Mines' Hartbeesfontein, Goedehoop and Klipfontein Sections and release this into the Spookspruit catchment.	
3.	Project Description	
3.1	WM stated that the area has been mined for approximately 30 years. In the mining process excess impacted mine water has been generated. In order to comply with legislation the impacted mine water needs to be treated to a suitable level for release into the catchment.	
3.2	WM indicated that the project would include water transfer pipelines (from Hartbeesfontein, Goedehoop, and Klipfontein Sections) to the water treatment plant and that it will be located on the Hartbeesfontein Section. The water would be treated to an acceptable standard and released back into the Spookspruit catchment. Other infrastructure needed would include; balancing dams, water treatment infrastructure, gypsum waste disposal facilities and supporting infrastructure, which includes the process control room, office, access roads to the site, change rooms for staff, etc.	
3.3	It was further discussed that the project will be developed in two phases, with an initial plant treatment capacity of 15 Ml/day, increasing to 30 Ml/day when required.	
3.3	WM outlined the HiPRO [®] process based on a flow diagram – see attached Power Point presentation. This process illustrated the dissolved solids and heavy metals removal, and the generation of two gypsum waste streams during the treatment process. The treatment process will be a compilation of precipitation, ultra-filtration and membrane technology, similar to that of the eMalahleni Water Reclamation Plant. It was also mentioned that, following membrane desalination, potable water can be obtained with additional infrastructure.	
3.4	MM then enquired if the water is clean after this treatment process?	
3.5	WM confirmed that the water would be fit for release to the catchment after treatment.	
3.6	WM said that after the first stage treatment a metal rich sludge is generated, while after the second and third stage of the process, gypsum cake and a small amount of process water are produced. It may be possible to partner with a third party to use the gypsum cake waste. The small percentage of process water produced would be put back to the coal washing process.	
3.7	SC enquired about the possibility to supply water to the local municipalities? In this case the water is pumped back into the river system.	
3.8	WM stated that currently they want to solve the problem of impacted mine water so that it is fit to release into the catchment. The scope of the project may change later to include the provision of water to municipalities.	Long-term – providing the water to other parties
3.9	SB confirmed that long term they may want to explore ways to provide the water to other parties, but in the short term the water needs to be treated.	
3.10	MvZ indicated that the catchment does need more clean water.	
3.11	WM highlighted that the layout of the MWRP plant will be similar to the eMalahleni Water Reclamation Plant, with a few variations. The MWRP will be slightly smaller holding 30 Ml in two holding facilities whereas eMalahleni holds 40 Ml. WM illustrated that the membrane buildings, office and workshop at the eMalahleni Water Reclamation Plant give a good idea of what the MWRP will look like.	
3.12	MvZ stated that there would be no clean water reservoirs at MWRP as the treated water is to be discharged.	
3.13	SC enquired about the size of MWRP in relation to the eMalahleni plant.	

3.14	WM confirmed that MWRP would treat 15M ³ /day whereas eMalahleni treats 25M ³ /day	
3.15	MvZ stated that this is with regards to Phase 1 of the MWRP. Phase 2 would treat 30M ³ /day.	
3.16	WM then introduced the generic MWRP HiPRO Plant layout. The plant area will provide the capacity to store waste in sludge disposal facilities for at least 5 years and provide an overall lifespan of 20 years.	
3.17	WM indicated that water will be treated to drinking water standards in terms of salinity. The treated water will also meet the Department of Water Affairs' receiving water quality requirements.	
3.18	WM discussed the various wastes generated in the process where approximately 21% would be metal rich sludge and 75% a gypsum cake. These two waste streams are kept separate for potential market purposes. Approximately 21 tons/day of waste will be generated for every 15M ³ of water treated. WM stated that MvZ is currently working on classifying the gypsum waste.	
3.19	MvZ stated that using the existing minimum requirements, as well as the new waste classification system, the gypsum cake is considered inert and can therefore be delisted to general waste.	
3.20	SB then gave a perspective that the volume of waste generated per day could fill the room where everyone was sitting.	
3.21	MvZ then indicated that in Phase 2 the waste stream would double.	
4.	Environmental Authorisation Process	
4.1	MvZ mentioned that Jones and Wagener (J&W) has been appointed to obtain all the required environmental licenses and authorisations for the project to proceed.	
4.2	As it is proposed to operate the MWRP as a separate entity, in case of mine closure, a separate Integrated Water Use Licence (IWUL) will be applied for the treatment plant activities. Also the existing IWULA for Middelburg Mines North Section and Klipfontein Section, as well as EMPR's would need to be updated to include the water reclamation activities.	
4.3	MvZ stated that, in order to obtain the required environmental authorisation, the project will be registered in terms of the new EIA Regulations, which became effective on 2 August 2010.	
4.4	MvZ gave an overview of the primary environmental legislation applicable to the project - refer to the Power Point presentation attached for details.	
4.5	MvZ then went over all the listed activities and gave an example that in terms of the National Environmental Management Act's (NEMA) GNR 544, the storage of lime triggers Activity 13 and will therefore require a Basic Assessment.	
4.6	SC enquired if lime triggers this activity based on its quantity?	
4.7	MvZ confirmed this. In total approximately 250m ³ of hazardous chemicals will be stored on site and thus falls within 80m ³ to 500m ³ bracket, which triggers activity 13. He added that lime has a high pH and can burn one's eyes and skin.	
4.8	MvZ indicated that based on all the listed activities, a full EIA process was triggered and the necessary specialist input would be obtained.	
4.9	MvZ outlined the diagram of the NEM:WA and NEMA listed activities in relation to the project footprint. He indicated that these diagrams were to explain it in simpler terms for the interested and affected parties (I&APs).	
4.10	MvZ introduced the Integrated Regulatory Process. MvZ indicated that according to this process, the DMR are required to approve the amended EMPRs.	
4.11	MvZ highlighted that the water use licence requirements overlaps	

	significantly with the National Environmental Management: Waste Act (NEM:WA) waste management facility licensing requirements. He indicated that it was discussed with MDEDET and DEA to apply for exemption from the Waste Act, but it was not granted and at this point both licences will have to be applied for.	
4.12	SC enquired where the MWRP plant would be situated.	
4.13	MvZ responded by stating that it would be located on the current Middelburg Mine property.	
4.14	SC stated that the MWRP is an industrial activity on mining land and because it has new triggers relating to water, the EMPR would need to be amended. SC also illustrated that DMR have a guideline document for compiling an EMP based on various activities.	Get hold of DMR guideline document.
4.15	SC enquired about the cost of the EMP relating to the management of the water issues. The cost of the MWRP needs to be determined.	
4.16	MvZ responded by stating that he is aware of the cost requirement, as MDEDET were also enquiring about the cost.	Determine cost of MWRP as part of Mine Environmental Management Program
4.17	MvZ noted that the mine EMPs can be amended to cover the new activities.	
4.18	LM said that there are two EMPs, one for the North & South Section and one for the Klipfontein section.	
4.19	SC then indicated that just one of the EMPs will need to be amended, namely the one where the MWRP will be located. The transfer of water from the one mine to another will just need to be explained in the EMP amendment application.	
4.20	MvZ illustrated that MDEDET is the lead authority due to NEMA EIA requirements ¹ . However, the DMR will not be by-passed in the process due to the MPRDA requirements.	
4.21	LM stated that MWRP is a separate entity belonging to the DTJV.	
4.22	SC responded by stating that there needs to be internal agreement between the two parties (Middelburg Mines and DTJV) on responsibility for the MWRP.	
4.23	SB then explained ownership rights to show the separate entities.	
4.24	MvZ then indicated that the specialist studies needed for this EIA would be sent out to DMR and MDEDET as part of the EIR.	
4.25	MvZ gave a summary of the environmental authorisation process.	
4.26	SC asked whether there was a Social and Labour plan for Middelburg Mines and that this should be amended to include this project. This would ensure that people can still benefit even when the mine is closed.	
4.27	MvZ responded by indicating that Middelburg Mine's Social and Labour plan will be updated to include the MWRP.	Study MMS social plan and update to include the MWRP
4.28	MvZ then stated that, according to the timeframe, each department would receive documents at the same time so that there is maximum engagement and interaction.	
4.29	SC suggested that the team consult with the eMalahleni Water Reclamation Plant and Optimum Coal Holdings to see how they went about the whole process.	
4.30	MvZ responded by stating that he would contact the relevant stakeholders at Optimum.	Contact relevant stakeholders at eMalahleni and Optimum

¹ In this case the MDEDET is the lead authority as explained in GNR 545 of 18 June 2010 due to Activity 5 being applicable to the MWRP project. In the case of all activities identified under GNR 544 and GNR 546 for the MWRP, the MDEDET also is the lead activity.

5.	Discussion and way forward	
5.1	SC stated that, with the development of the MWRP, the Spookspruit forum would probably not be required anymore.	
5.2	WM indicated that there are, however, many other issues and areas that require attention within the Spookspruit catchment.	
5.3	SC also suggested that the team consults with the Principal Inspector of the Mines to indicate what the intentions are to avoid risk of collapse of flooded underground workings.	
5.4	WM responded by stating that all mining activities are opencast and so fewer risks are predicted.	
5.5	SC stated that DMR had directed Middelburg Mines to update their EMPR in terms of the provisions of the MPRDA. She suggested that the project team enquire how far they are in that process and then integrate this project with the updating of the EMPR. SC stated that one integrated document could then be developed, which would make the approval process a lot easier.	Consideration be given to integrating the MWRP with that of the upgrading of the existing EMPR
5.6	WM enquired whether the DMR would be open to meetings and updates.	
5.7	SC stated that it does help to attend meetings to answer queries, but their branch has cut down on meetings due to workload. SC said that they would attend and advise on the process, but not necessarily on a regular basis.	
5.8	MvZ suggested meetings be held at strategic decision points in the project.	Invite the DMR to authority meetings at strategic decision points
5.9	SC responded by stating DMR has a busy schedule until February 2011 and driving out to site for meetings is time consuming, so they would prefer to have meetings in their offices.	
6.	Closure	
6.1	MvZ concluded the meeting by thanking DMR for their time.	

Date 25 October 2010

Minuted by: Katherine de Jong

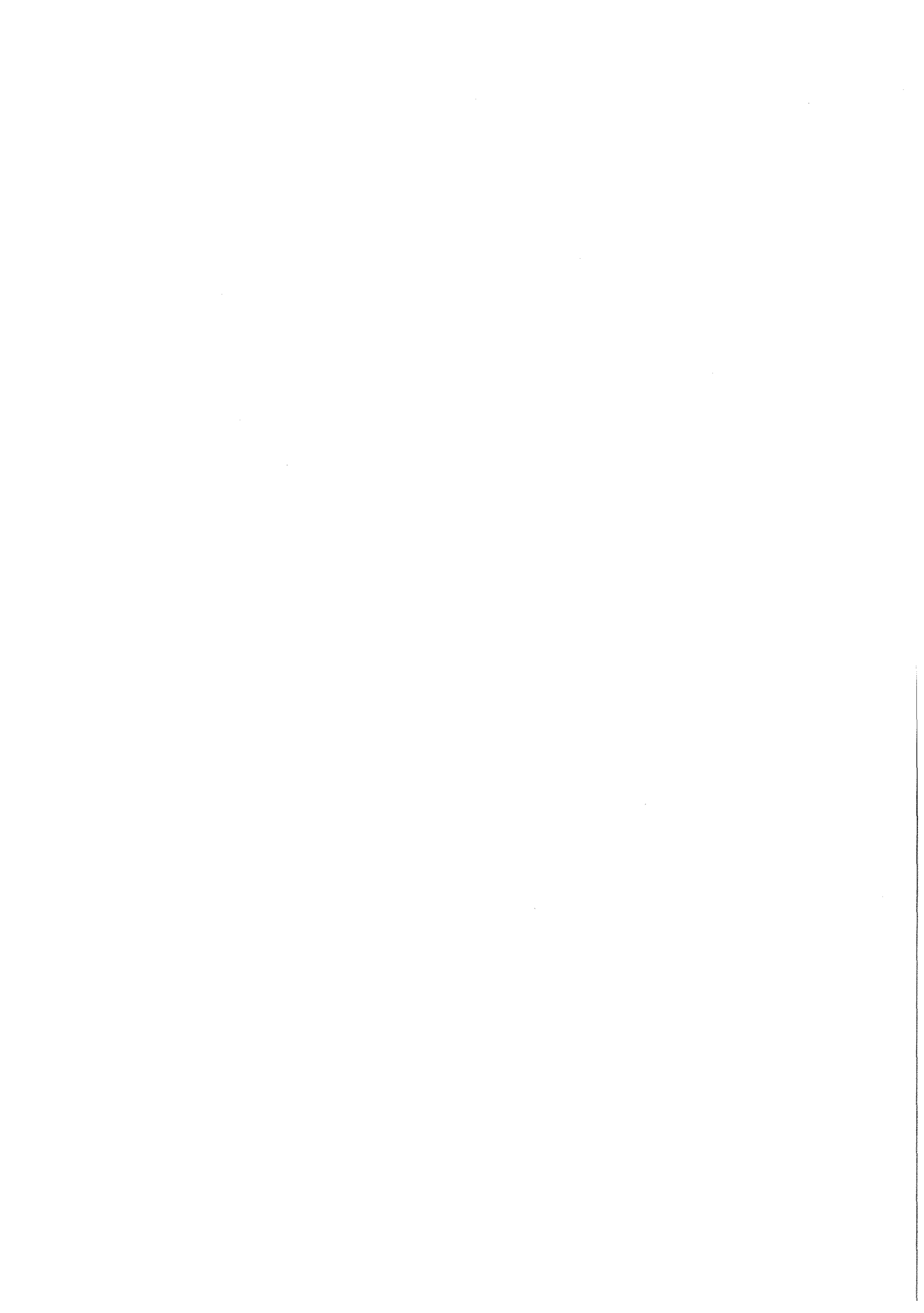
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Meeting\B478_KdJ_MWRP_DMRmeeting_Minutes_25October2010_Reviewed_MvZ.doc



A.5 Final Scoping Report – Letter from MDEDET



MPUMALANGA PROVINCIAL GOVERNMENT

Cnr Botha & Northey Str
Pavilion Building
Next to Boston College
WITBANK
1035



P.O Box 383
WITBANK
1035
Tel: (013) 690 2595
International Tel: +27 13 690 2595
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International Fax: +27 13 690 3704

Department of Economic Development ,Environment and Tourism

Liliko letekufufukiswa kwemotto
nekuhliswa

UmNyango wezokufufukiswa
komnotho nezokutlanywa

Department Ekonomieseontwikkeling en
beplanning

Enquiries: Hlamarisa Mavodze

Attn: Marius van Zyl
Jones & Wagener Consulting Civil Engineers
P.O Box 1434
Rivonia
21228

Fax no: (011) 519 0201
Tel: no (011) 519 0217

Dear Sir/Madam


RE: Application for Environmental Authorization for the proposed Middelburg Water Reclamation Project

The Scoping Report and Plan of Study for Environmental Impact Assessment which was submitted by you in respect of the abovementioned Application and received by the Department on 06 June 2011 has been accepted by the Department. You may accordingly proceed with undertaking the Environmental Impact Assessment in accordance with the tasks that are outlined within the Plan of Study for Environmental Impact Assessment.

Notwithstanding the above, your attention is drawn to the fact that the success of the Application may be prejudiced by:

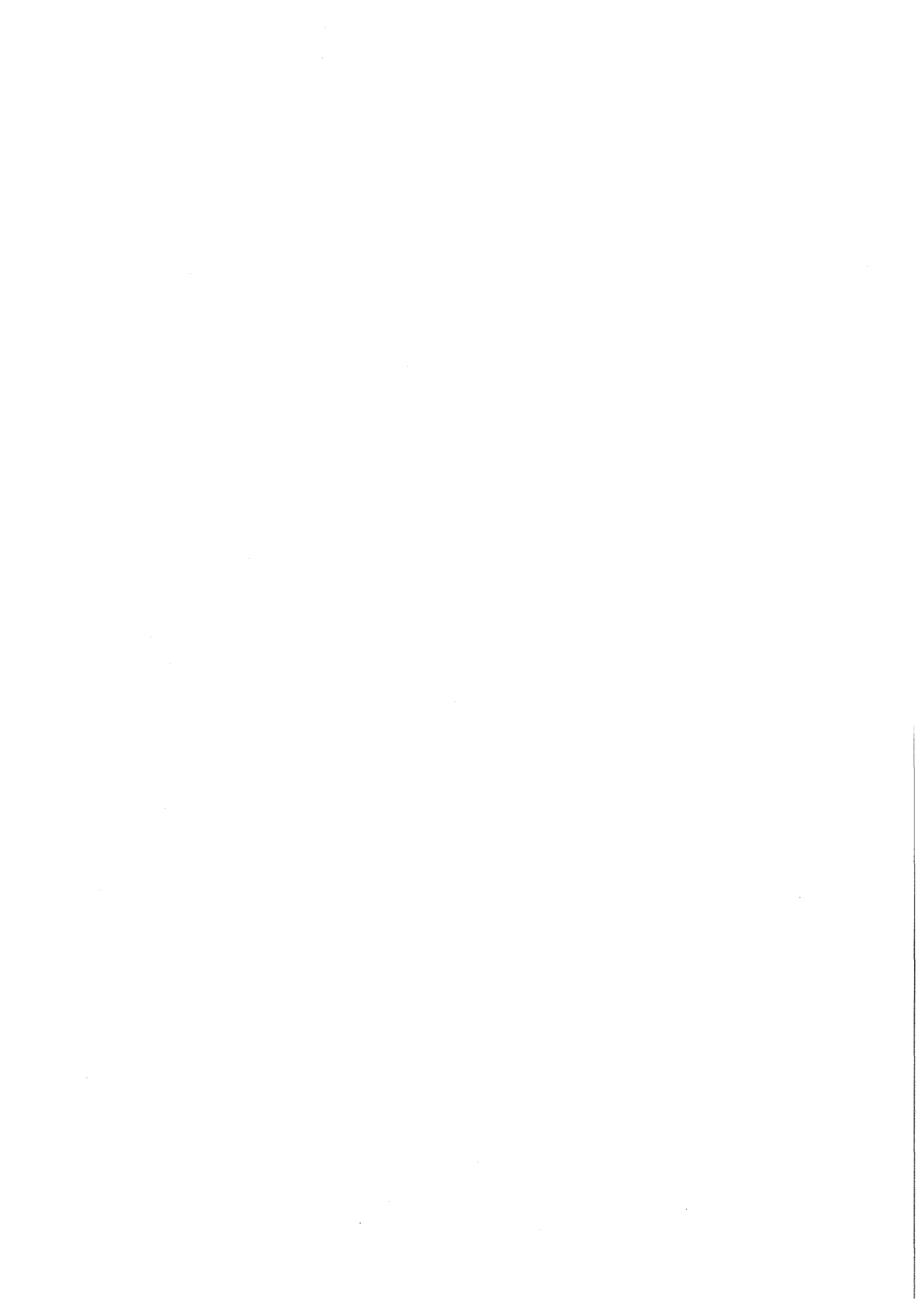
*Comments from all the interested and affected parties.
Not undertaking all relevant studies as indicated within the Scoping report.*

Yours faithfully


Ms D Tswai
Deputy Director:EIM
Date: 2011/07/11

054493

A.6 Final Scoping Report – Letter from DEA





environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Private Bag X 447, PRETORIA, 0001- Fedsure Building, 315 Pretorius Street, PRETORIA

Ref No.: 12/9/11/L492/6

Enquiries: Mr Matjelele Phaladi

Tel: (012) 310 3870 Fax: (012) 310 3753

Email: tramavhona@environment.gov.za/ @environment.gov.za

Jones & Wagener (Pty) Ltd
P O Box 1434
RIVONIA
2128

Fax No. (011) 519 0201

Attention: Marius Van Zyl

ACCEPTANCE OF FINAL SCOPING REPORT FOR THE MIDDLEBURG WATER RECLAMATION PROJECT.

The Department confirms having received the above-mentioned Final Scoping Report for the above-mentioned activity.

The Department has evaluated the submitted FSR and is satisfied that the documents comply with the minimum requirements of the Environmental Impact Assessment (EIA) Regulations, 2010. The FSR is hereby accepted by the Department in terms of regulation 30(1)(a) of the EIA Regulations, 2010.

You may proceed with the environmental impact assessment process in accordance with the tasks contemplated in the Plan of Study for Environmental Impact Assessment as required in terms of the EIA Regulations, 2010.

Proof of correspondence with the various stakeholders must be included in the Final EIR. Should you be unable to obtain comments, proof should be submitted to the Department of the attempts that were made to obtain comments.

The applicant is hereby reminded to comply with the requirements of regulation 67 with regard to the time period allowed for complying with the requirements of the Regulations, and regulations 56 and 57 with regard to the allowance of a comment period for interested and affected parties on all reports submitted to the competent authority for decision-making. The reports referred to are listed in regulation 56(3a-3h).

You are hereby reminded that the activity may not commence prior to Waste Management Licence being granted by the Department.

Yours sincerely


Mr Isnaam Abader

Deputy Director-General
Environmental Quality and Protection

Letter signed by: Mr Matjelele Phaladi

Designation: Environmental Specialised Production: Permitting

Date: 18/07/2011

054513



DOUGLAS TAVISTOCK JOINT VENTURE

MIDDELBURG WATER RECLAMATION PLANT PROJECT
ENVIRONMENTAL IMPACT ASSESSMENT
Draft EIR

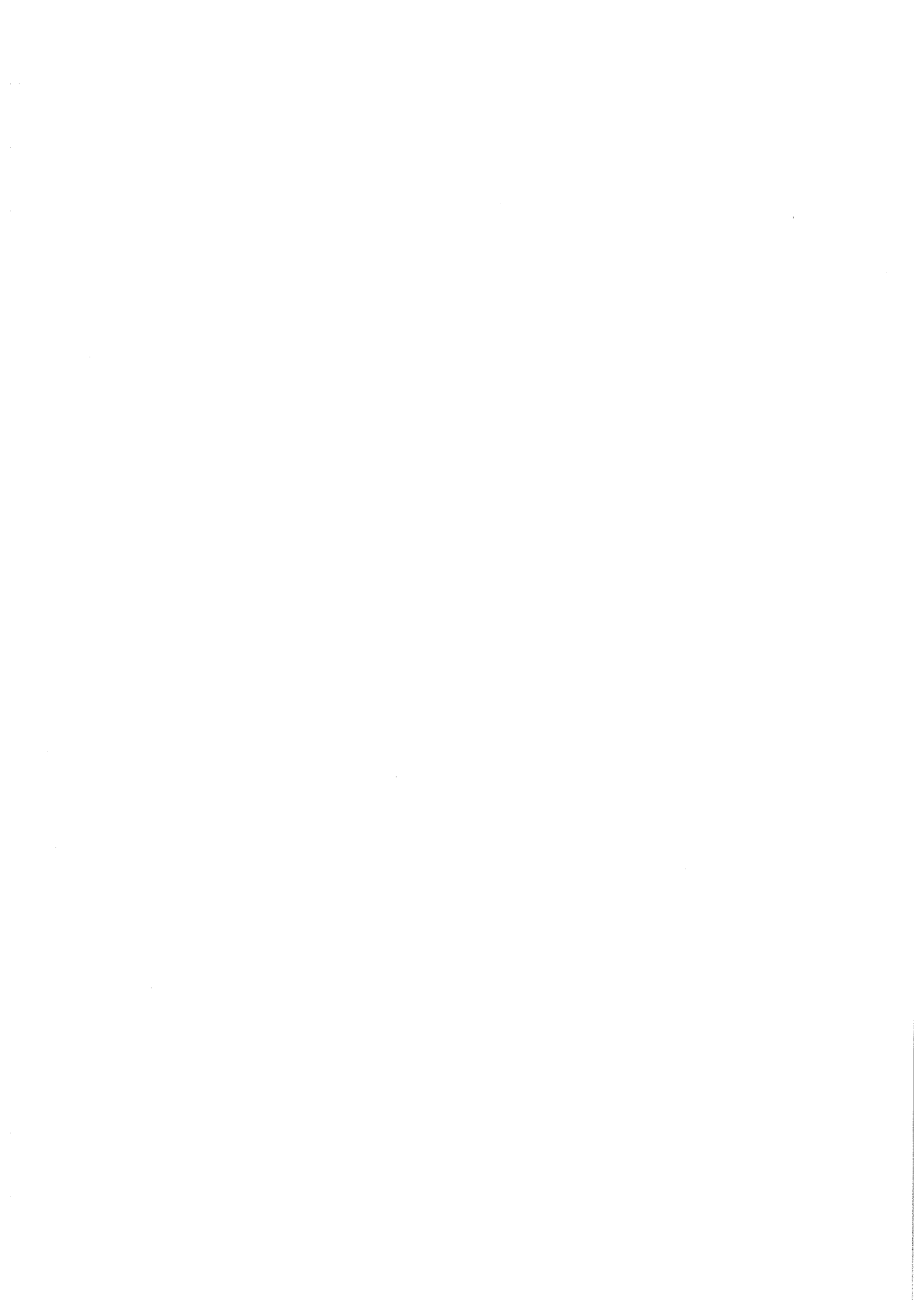
Report: JW45/11/B478 - Rev C

Appendix B: Public Participation

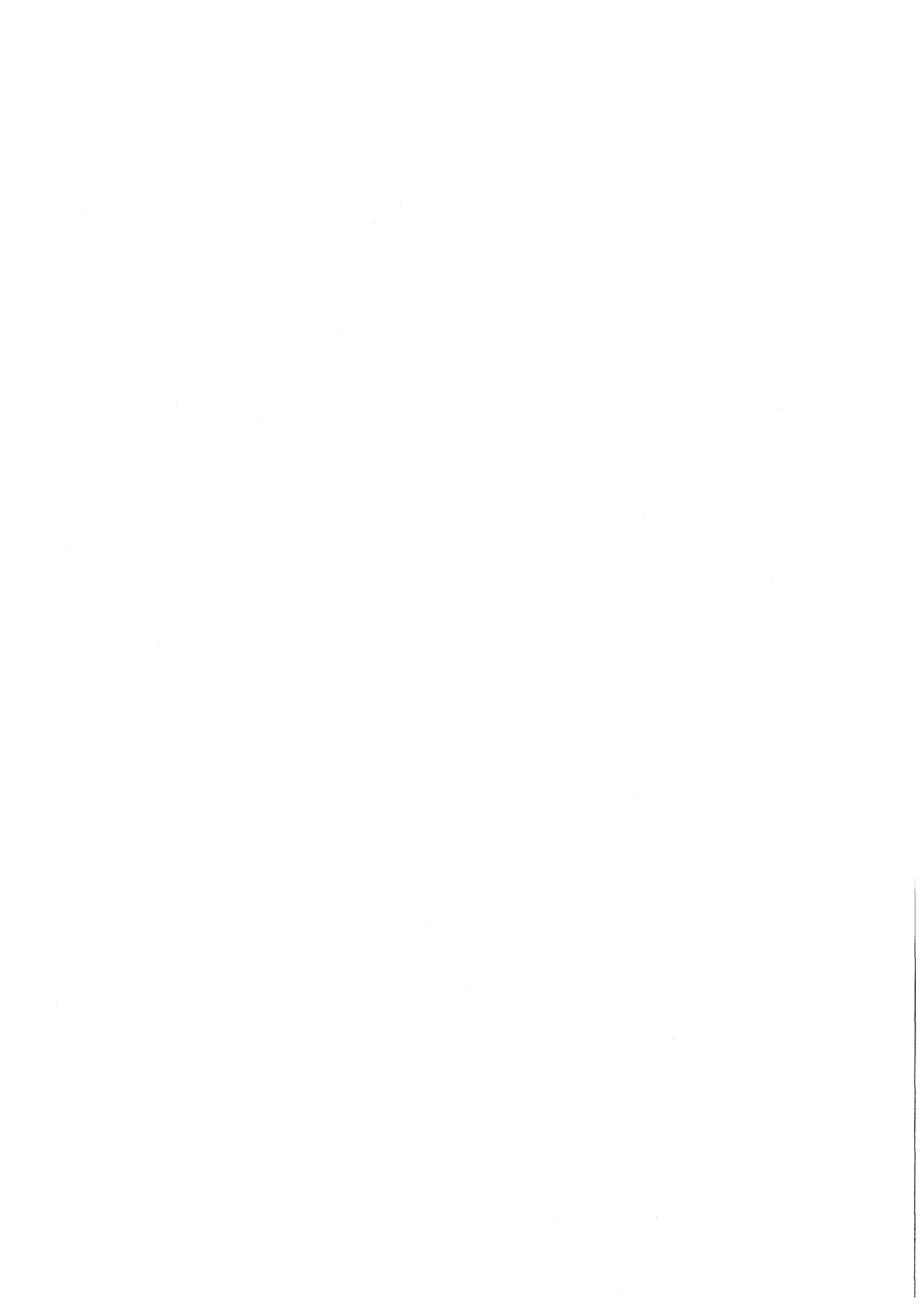
APPENDIX B - Table of Contents

- B.1 Landowner Notification Forms
- B.2 Stakeholder Database
- B.3 Background Information Document
- B.4 Letters to Stakeholders
- B.5 Site Notices
- B.6 Newspaper Advertisements – Announcement Phase
- B.7 Newspaper Advertisements – Scoping Phase
- B.8 Comments and Response Report
- B.9 Comments from Stakeholders
- B.10 Minutes from Public Meeting – Scoping Phase
- B.11 Public Participation Plan





B.1 Landowner Notification Forms





Jones & Wagener

Consulting Civil Engineers

59 Bevan Road PO Box 1434 Rivonia 2128 South Africa
Tel: 00 27 (0)11 519 0200 Fax: 00 27 (0)11 519 0201 email: post@jaws.co.za

Ingwe Surface Holdings
6 Hollard Street
Marshalltown
JOHANNESBURG
2001

21 July 2011

Our Ref: **B478**

AND

Tavistock Collieries
23 Melrose Arch
MELROSE NORTH
2196

Attention: Mr J. Muller

Dear Sir

NOTICE OF INTENT TO CONSTRUCT AND OPERATE A WATER TREATMENT PLANT ON PORTION 9 OF THE FARM HARTBEESTFONTEIN 339 JS

Middelburg Mines generates excess impacted mine water and intends constructing a water treatment plant, called the Middelburg Water Reclamation Project (MWRP) to treat excess impacted mine water from the Hartbeestfontein, Goedehoop and Klipfontein sections to a suitable standard for release into the Spookspruit catchment, a tributary of the Upper Olifants River catchment. The MWRP is a joint venture between BHP Billiton Energy Coal South Africa Limited (BECSA) and Tavistock Collieries (Pty) Limited, called the Douglas Tavistock Joint Venture (DTJV). The DTJV has conducted a pre-feasibility study to determine the viability of constructing and operating a water treatment plant located on Middelburg Mine Services' North Section. The project is now at a definition phase study to determine its ultimate feasibility.

If feasible and the plant becomes operative, the final product of the MWRP will be treated water complying with the Department of Water Affairs interim receiving water quality objectives or RWQOs. The envisaged point of discharge of this water will be in the Niekerkspruit, a tributary of the Spookspruit.

For this project an Environmental Impact Assessment (EIA) is being carried out and if successful an environmental authorisation will be granted to the DTJV to construct and operate the MWRP. In terms Section 15 of the newly promulgated EIA regulations, the applicant for an authorisation must give written notice of the proposed activity to the owner or person in control of the land on which the activity is to be undertaken. In this case the activity will be the construction and operation of a water treatment plant and associated infrastructure like waste disposal facilities on Portion 9 of the Farm Hartbeestfontein 339JS. The owner of the land must be informed that he/she may participate in the public participation process as contemplated in the EIA regulations, which is the purpose of this letter.

JONES & WAGENER (PTY) LTD REG NO. 1993/02655/07 VAT No. 4410136685

DIRECTORS: **PW Day (Chairman)** PrEng MSc(Eng) FSAICE **D Brink (CEO)** PrEng Hons BEng FSAICE **PG Gage** PrEng CEng BSc(Eng) GDE MSAICE AStructE **JP van der Berg** PrEng PhD MEng MSAICE
TT Goba PrEng MEng FSAICE **GR Wardle (Alternate)** PrEng MSc(Eng) FSAICE
TECHNICAL DIRECTORS: **JA Kempe** PrEng BSc(Eng) GDE MSAICE AStructE **CG Waygood** PrEng BSc(Eng) MSAICE **JR Shamrock** PrEng MSc(Eng) MSAICE **MWM JE Glendinning** PrSciNat MSc(Geochem)
NJ Vermauten PrEng PhD MEng MSAICE **DC Rowe** PrEng BSc(Eng) MSAICE
ASSOCIATES: **BR Antrobus** PrSciNat BS(Hons) MSAIEG **MW Palmer** MSc(Eng) AMSAICE **AJ Bain** BEng AMSAICE **HR Aschenborn** PrEng Hons Eng MSAICE **PJJ Smit** Hons BEng AMSAICE
R Puchner PrSciNat MSc(Geol) MSAIEG MAEG **TG le Roux** PrEng MEng MSAICE
CONSULTANTS: **W Ellis** PrEng CEng MStructE **FINANCIAL MANAGER:** **HC Neveling** BCom MBL

Member of Consulting Engineers South Africa

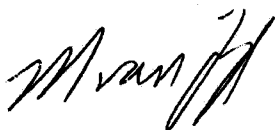
The required public participation process (PPP) has commenced and you have been automatically added to the list of Interested and Affected Parties (I&APs). During the PPP you have and will continue to be invited to attend public meetings, as well as to provide input and comment on documents such as the draft and final Scoping Report and the draft and final Environmental Impact Report. Your input into the impact assessment process will be valued and all issues and concerns identified by yourself (and others) will be taken into account by the Environmental Assessment Practitioner, which is Jones & Wagener (Pty) Ltd.

We request, on behalf of the DTJV, for you to sign proof that you have received this letter. A copy of this letter and proof of receipt will be attached to the project draft Environmental Impact Report that needs to be submitted to the Mpumalanga Department of Economic Development, Environment and Tourism (MDEDET), Department of Environmental Affairs (DEA) and the Department of Water Affairs (DWA).

This letter must not be construed as giving consent that the activity may be constructed on Portion 9 of the Farm Hartbeestfontein, but merely that you have been informed that there is intention to construct a water treatment plant, waste disposal facilities and other associated infrastructure and that the potential issues and impacts associated with this need to be addressed in the EIA process. Please find attached in **Appendix A** a list of all the properties that will be affected by the MWRP and its associated infrastructure.

You are welcome to contact, Mr M van Zyl of Jones & Wagener, either by phone or e-mail, to discuss the matter. Mr Van Zyl's telephone number is 011 519 0200 and e-mail address is vanzyl@jaws.co.za.

Yours faithfully



Marius van Zyl (Pr.Sci.Nat.)
for Jones & Wagener

APPENDIX A

Properties affected by the Middelburg Water Reclamation Project

Property Name	Portion Description	Title Deed Number	Registered Owner(s)	Percentage ownership
Goedehoop 315 JS	14	T3820/1970	J.A. Visser	100
	RE 5	T18663/1999	Ingwe Surface Holdings	84
			Tavistock Collieries	16
	RE 9	T76588/1999	Ingwe Surface Holdings	60
			Tavistock Collieries	40
	Hartebeesfontein 339 JS	9	T76564/1999	Ingwe Surface Holdings
Tavistock Collieries				40
6		T76564/1999	Ingwe Surface Holdings	60
			Tavistock Collieries	40
Sterkwater 317 JS	RE	T141787/1998	Tavistock Collieries	100
	RE 1	T125877/1997	Isabel Schoeman Landgoed CC	100
	RE 4	T2706/1999	Tavistock Collieries	100
Rondeboschje 468 JS	1	T48409/1993	Ingwe Surface Holdings	60
			Tavistock Collieries	40
Bankfontein 340 JS	RE 4	T76564/1999	Ingwe Surface Holdings	60
			Tavistock Collieries	40
Rietfontein 314 JS	RE 4	T18663/1999	Ingwe Surface Holdings	84
			Tavistock Collieries	16



Jones & Wagener

Consulting Civil Engineers

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Tel: 00 27 (0) 11 519 0200 Fax: 00 27 (0) 11 519 0201 email: post@jawsco.za

Mr J. Muller
c/o Ingwe Surface Holdings and Tavistock

21 July, 2011

Our Ref: **B478**

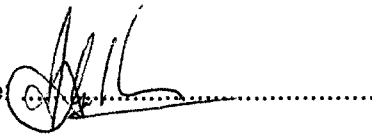
Attention: Mr J. Muller

ACKNOWLEDGEMENT OF RECEIPT

I hereby acknowledge receipt of a letter, titled: **NOTICE OF INTENT TO CONSTRUCT AND OPERATE A WATER TREATMENT PLANT ON PORTION 9 OF THE FARM HARTBEESTFONTEIN 339JS**, with reference number **B478**, dated **21 July 2011**.

Name: Johan Botha Muller

ID Number: 5710045055083

Signature: 

Date: 22 July 2011

JONES & WAGENER (PTY) LTD REG NO. 1993/02655/07 VAT No. 4410136685

DIRECTORS: PW Day (Chairman) PrEng MSc(Eng) FSAICE D Brink (CEO) PrEng Hons BEng FSAICE PG Gage PrEng CBng BSc(Eng) GDEMSAICE AISrudE JP van der Berg PrEng PhD MEng MSAICE
TT Goba PrEng MEng FSAICE GR Wardle (Alternate) PrEng MSc(Eng) FSAICE
TECHNICAL DIRECTORS: JA Kempe PrEng BSc(Eng) GDEMSAICE AISrudE CG Waygood PrEng BSc(Eng) MSAICE JR Shamrock PrEng MSc(Eng) MSAICEMWM JE Glendinning PrSciNat MS(Geochem)
NJ Vermeulen PrEng PhD MEng MSAICE DC Rowe PrEng BSc(Eng) MSAICE
ASSOCIATES: BR Antrobus PrSciNat BSc(Hons) MSAIEG MW Palmer MSc(Eng) AMSAICE AJ Bain BEng AMSAICE HR Aschenborn PrEng Hons Eng MSAICE PJJ Smit Hons BEng AMSAICE
R Puchner PrSciNat MSc(Geol) MSAIEG MAEG TG le Roux PrEng MEng MSAICE
CONSULTANTS: W Ellis PrEng CBng MISrudE **FINANCIAL MANAGER:** HC Neveling BCom MBL

Member of Consulting Engineers South Africa



Jones & Wagener

Consulting Civil Engineers

59 Bevan Road PO Box 1434 Rivonia 2128 South Africa
Tel: 00 27 (0) 11 519 0200 Fax: 00 27 (0) 11 519 0201 email: post@jaws.co.za

Muhanga Mining
P.O. Box 1070
MIDDELBURG
1050

5 November 2010

Our Ref: **B478**
mwr_irp_reg notification to owner
muhanga_final_101105.doc

Attention: Mr H. Deale

Dear Sir

NOTICE OF INTENT TO CONSTRUCT A WATER DISCHARGE PIPELINE ON A PORTION OF PORTION 14 OF THE FARM GOEDEHOOP 315 JS

Middelburg Colliery generates excess impacted mine water and intends constructing a water treatment plant, called the Middelburg Water Reclamation Project (MWRP) to treat excess impacted mine water from the Hartbeesfontein, Goedehoop and Klipfontein sections to a suitable standard for release into the Spookspruit catchment, a tributary of the Upper Olifants River catchment. The MWRP is a joint venture between BHP Billiton Energy Coal South Africa Limited (BECSA) and Tavistock Collieries (Pty) Limited, called the Douglas Tavistock Joint Venture (DTJV). The DTJV has conducted a pre-feasibility study to determine the viability of constructing and operating a water treatment plant located on Middelburg Mine Services' North Section. The project is now at a definition phase study to determine its ultimate feasibility.

If feasible and the plant becomes operative, the final product of the MWRP will be treated water complying with the Department of Water Affairs interim receiving water quality objectives or RWQOs. The envisaged point of discharge of this water will be in the Niekerkspruit, a tributary of the Spookspruit. Due to geotechnical conditions indentified by the engineers involved in the project, the clean water discharge pipeline will in all likelihood have to traverse a small portion of Portion 14 of the Farm Goedehoop – see attached figure for the proposed pipeline route.

For this project an Environmental Impact Assessment (EIA) will be carried out and if successful an environmental authorisation will be granted to the DTJV to construct and operate the MWRP. In terms Section 15 of the newly promulgated EIA regulations, the applicant for an authorisation must give written notice of the proposed activity to the owner or person in control of the land on which the activity is to be undertaken. In this case the activity will be the construction of a fall-out pipeline over a small portion of Portion 14 of the Farm Goedehoop. The owner of the land must be informed that he/she may participate in the public participation process as contemplated in the EIA regulations, which is the purpose of this letter.

Once the required public participation process (PPP) commences, you will automatically be added to the list of Interested and Affected Parties. During the PPP you will be invited to attend open days, as well as to provide input and comment on documents such as the draft and final Scoping Report and the draft and final Environmental Impact Assessment Report. Your input into the impact assessment process will be valued and all issues and concerns identified by yourself (and others) will be taken into account by the Environmental Assessment Practitioner, which is Jones & Wagener (Pty) Ltd.

JONES & WAGENER (PTY) LTD REG NO 1993/02655/07 VAT No 4410136685

DIRECTORS: **PW Day (Chairman)** PrEng MSc(Eng) FSAICE **D Brink (CEO)** PrEng Hons BEng FSAICE **PG Gage** PrEng CEng BSc(Eng) GDE MSAICE AStructE **JP van der Berg** PrEng PhD MEng MSAICE
TT Goba PrEng MEng FSAICE **GR Wardle (Alternate)** PrEng MSc(Eng) FSAICE
TECHNICAL DIRECTORS: **JA Kampa** PrEng BSc(Eng) GDE MSAICE AStructE **CG Waygood** PrEng BSc(Eng) MSAICE **JR Shanrock** PrEng MSc(Eng) MSAICE MIVM **JE Glendinning** PrSciNat MSc(Geochem)
NJ Vermeulen PrEng PhD MEng MSAICE **DC Rowe** PrEng BSc(Eng) MSAICE
ASSOCIATES: **BR Antrabus** PrSciNat BS(Hons) MSAIEG **MW Palmer** MSc(Eng) AMSAICE **AJ Bain** BEng AMSAICE **HR Aschenborn** PrEng Hons Eng MSAICE **PJ Smit** Hons BEng AMSAICE
R Puchner PrSciNat MSc(Geol) MSAIEG MAEG **TG le Roux** PrEng MEng MSAICE
CONSULTANTS: **W Ellis** PrEng CEng MStructE **FINANCIAL MANAGER:** **HC Naveling** BCom MBL

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We request, on behalf of the DTJV, for you to sign proof that you have received this letter. A copy of this letter and proof of receipt will be attached to the project registration form that needs to be submitted to the Mpumalanga Department of Economic Development, Environment and Tourism (MDEDET) in order for the project to formally commence.

This letter must not be construed as giving consent that the pipeline may be constructed on a portion of Portion 14 of the Farm Goedehoop, but merely that you have been informed that there is intention to construct a pipeline and that the potential issues and impacts associated with this need to be addressed in the EIA process.

You are welcome to contact, Mr M van Zyl of Jones & Wagener, either by phone or e-mail, to discuss the matter. Mr Van Zyl's telephone number is 011 519 0200 and e-mail address is vanzyl@jaws.co.za.

Yours faithfully



Marius van Zyl (Pr.Sci.Nat.)
for Jones & Wagener

Document source: D:\MWR_IRP_Reg Notification to owner Muhanga_Final_101105.doc
Document template: Letter_tem_Rev2_Jun10.dotx



Jones & Wagener

Consulting Civil Engineers

59 Bevan Road PO Box 1434 Rivonia 2128 South Africa
Tel: 00 27 (0) 11 519 0200 Fax: 00 27 (0) 11 519 0201 email: post@jawsco.za

By hand

Muhanga Mining
P.O. Box 1070
MIDDELBURG
1050

5 November 2010

Our Ref: **B478**
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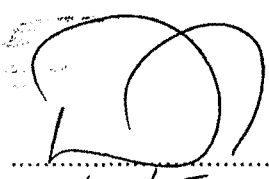
Attention: Mr H. Deale

ACKNOWLEDGEMENT OF RECEIPT

I hereby acknowledge receipt of a letter, titled: **NOTICE OF INTENT TO CONSTRUCT A WATER DISCHARGE PIPELINE ON A PORTION OF PORTION 14 OF THE FARM GOEDEHOOP 315 JS**, with reference number mwr_irp_reg notification to owner muhanga_approved_browns_101020.doc, dated **5 November 2010**.

Name: HJT DEALE

ID Number: 6902105121082

Signature: 

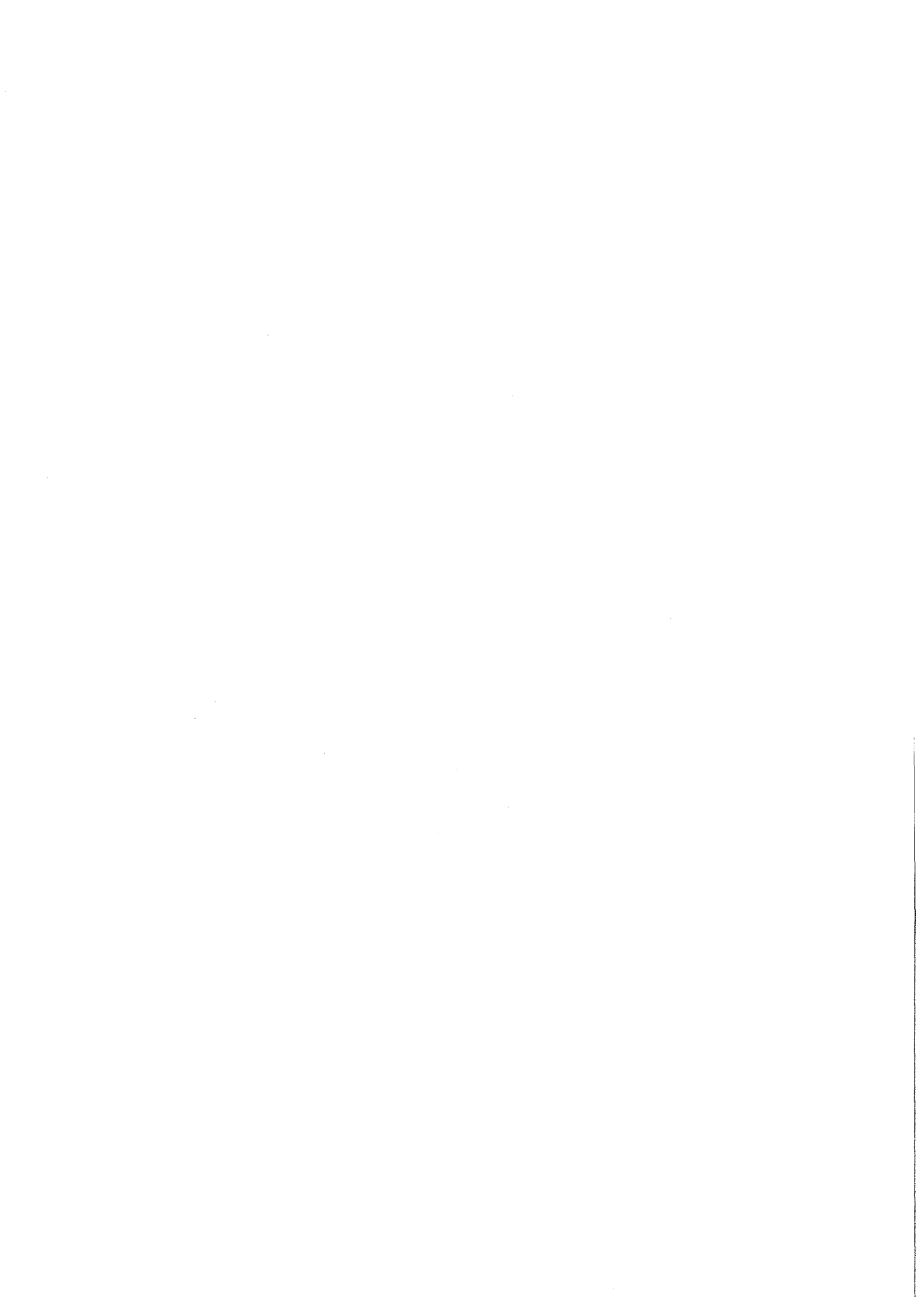
Date: 05/11/10

JONES & WAGENER (PTY) LTD REG NO 1993/02655/07 VAT No. 4410136685

DIRECTORS: PW Day (Chairman) PrEng MSc(Eng) FSAICE D Brink (CEO) PrEng Hons BEng FSAICE PG Gage PrEng CEng BSc(Eng) GDE MSAICE AIArctUE JP van der Berg PrEng PhD MEng MSAICE
TT Goba PrEng MEng FSAICE GR Wardle (Alternate) PrEng MSc(Eng) FSAICE
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NJ Vermeulen PrEng PhD MEng MSAICE DC Rowe PrEng BSc(Eng) MSAICE
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R Puchner PrScNal MSc(Geol) MSAIEG MAEG TG le Roux PrEng MEng MSAICE
CONSULTANTS: W Ellis PrEng CEng MIArctUE **FINANCIAL MANAGER:** HC Neveling BCom MBL

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B.2 Stakeholder Database



ENVIRONMENTAL IMPACT ASSESSMENT

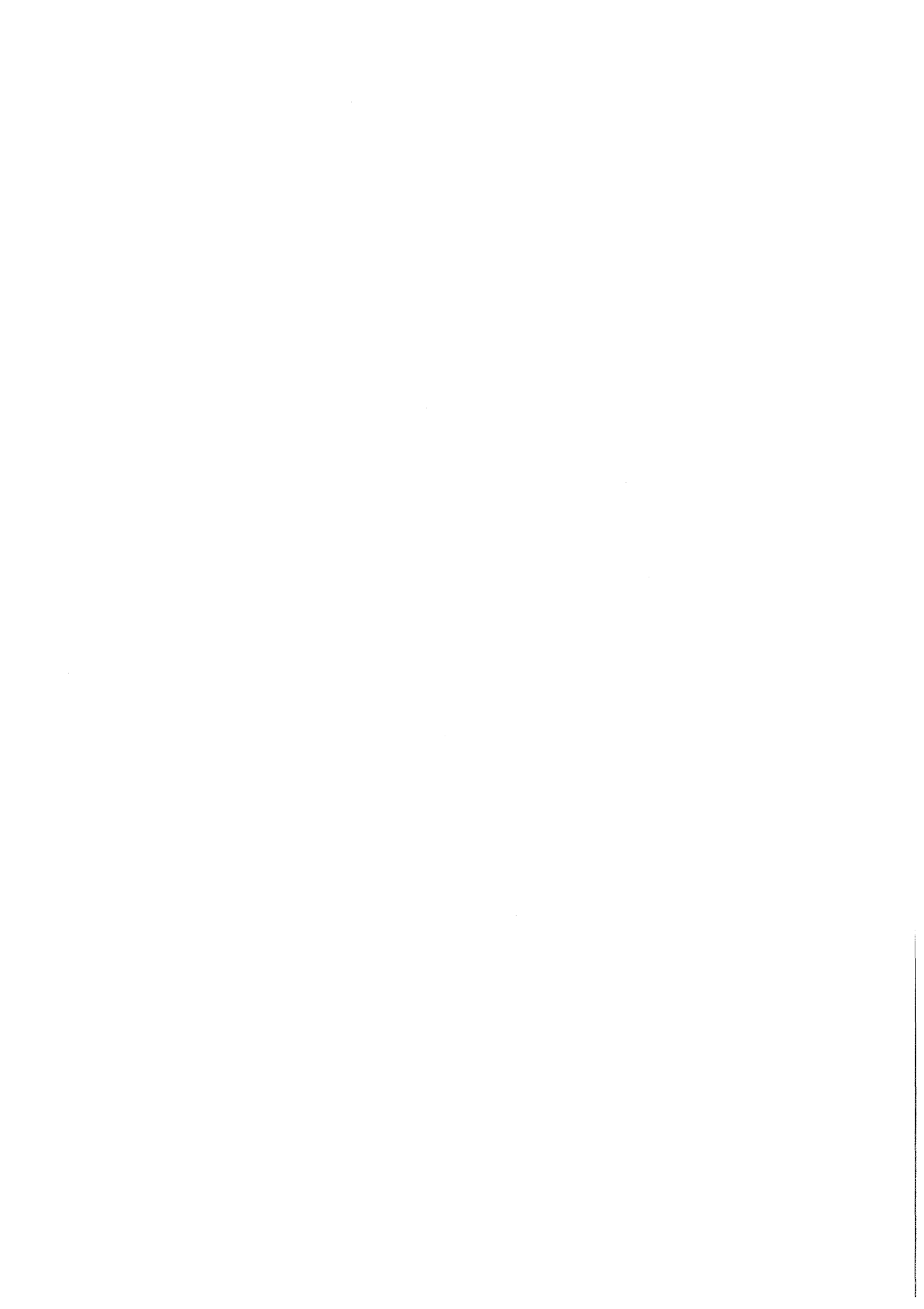
DOUGLAS TAVISTOCK JOINT VENTURE'S PROPOSED MIDDELBURG WATER RECLAMATION PROJECT

STAKEHOLDER DATABASE (in alphabetical order according to surname)

TITLE	NAME	SURNAME	POSITION	COMPANY
Mnr	Michael	Allen	Grondeienaar	Plaas: Hartbeesfontein
Ms	Marlaine	Andersen	Senior Regional Content Researcher	Leads 2 Business
Mr	A	Anthony		Dept of Public Works, Roads & transport: Mpumalanga
Ms	Terry	Baker	Technical Director	Iliso Consulting
Mrs	Lerato	Bapela	Water Resource Planner	Dept of Water Affairs
Mr	Colin	Batchelor		ITT Water and Wastewater
Dr	Garth	Batchelor	Director: Environmental Impact Assessments	MDEDET
Mr	Coen	Bester	President	Middelburg Chamber of Commerce
Ms	Thandiwe	Biyela	Deputy Director: Mineral laws	Dept of Mineral Resources
Mr	Steven	Bloy		Middelburg Colliery
Ms	Heather	Booyesen	Environmental Specialist	Samancor Chrome
Ms	Lyness	Botha	Project Administrator	DTJV
Mr	Willie	Botha	General Manager	Middelburg Ferrochrome
Mr	Rudolph	Bouwer	Town Engineer:	Steve Tshwete Local Municipality
Mr	Steve	Brown	Project Director	DTJV
Mr	Lood	Büchner		Kanhym Estate
Mrs	Christa	Cass		
Ms	Karen	Chetty	Group Water Specialist	Lonmin
Ms	Sonia	Chipu	Environmental Officer	Department of Mineral Resources: Mpumalanga
Mr	Frank	Claesere	Landowner	
Mrs	Anneliza	Collett	Land-Use & Soil Management (Agriculture)	Dept of Agriculture, Forestry & Fisheries
Mr	Mike	Combrink		Dept of Land-Use
Mr	Werner	Comrie	Inkomati Water Management Area	Dept of Water Affairs
Mr	JN	De Jager	Landowner	
Ms	Marie	de Lange	Project Administrator	ITT Water and Wastewater
Mr	CAM	De V Gouws	Landowner	Farm: Driefontein
Mr	NB	De Wet	Landowner	Farm: Rhenosterfontein
Mr	Hoffman	Dieter		Provincial Roads Administration
Mr	Deon	du Plessis	Deputy Director of Mineral Laws	Department of Mineral Resources: Mpumalanga
Mr	Pieter	du Toit		Exxaro
Ms	Liesel	Ehlers		Samancor Chrome
Mr	Ismael	Essa		SANRAL
Mr	Dan	Ferreira	Director	Dan Ferreira Technical Services
Mr	Willie	Fouche	Municipal Manager	Steve Tshwete Local Municipality
Mrs	Sharon	Gerber	HSEC Specialist	DTJV
Ms	Retha	Gerber	Departmental Administrator	Tshwane University of Technology
Mr	G	Gerrits		Gerrie Gerrits Boerdery
Ms	Andrea	Gibb		
Mr		Gordon	Landowner	
Mnr	Pieter	Grobler		Aurecon
Mr	Robert	Grobler	Director	Black Wattle
Mr	Peter	Gunther		eMalahleni Water Reclamation Plant
Mr	FR	Hattingh	Landowner	
Mnr	Andre	Henning	Grondeienaar	Plaas: GoedeHoop
Ms	Jacqui	Hex	Environmental Scientist	Jones & Wagener
Mr	Phillip	Hine		SAHRA
Mr	Matthews	Hlabane	Secretary	SA Green Revolutionary Council
Mr	Frank	Hodgson		
Mr	Heine	Hoffman		
Mr	JH	Human		Boschmanspoort
Mr	L	Human	Land Development Manager	Eskom Distribution
Mrs	T	Janse van Rensburg	Manager	Steve Tshwete Local Municipality

TITLE	NAME	SURNAME	POSITION	COMPANY
Mr	Danie	Joubert	General Manager	Klomag cc
Mr	Jaco	Kleynhans	Director	JKC
Mr	Mike	Koen	Project Manager	DTJV
Mrs	L	Legabi	Manager	Steve Tshwete Local Municipality
Ms	MP	Leshilo	Manager	Steve Tshwete Local Municipality
Mr	Sunday	Mabasa	Regional Manager	Department of Mineral Resources
Mr	David	Mabuza	Premier	Mpumalanga Provincial Government
Mr	S	Macevele	Deputy Director: Water Quality Management	Dept of Water Affairs
Mr	Aubrey	Madamalala	Parks and Recreation Official	Steve Tshwete Local Municipality
Mr	M M	Mahamba	Manager: Town Planning	Steve Tshwete Local Municipality
Mr	Tshepo	Mahao		BHP Billiton
Mr	Jabu	Mahlangu	MEC	Department of Economic Develop,ent, Environment and Tourism
Ms	Dikeledi	Mahlangu	MEC	Department of Health : Mpumalanga
Mr	FS	Mahlangu		Dept of Land Affairs
Mr	Vusi	Mahlangu	Social Services - Environmental Manager	Nkangala District Municipality
Clr	NJ	Mahlangu	MMC for Infrastructure Development & Service Delivery	Steve Tshwete Local Municipality
Ms	JC	Mahlangu		
Mr	Sibosiso	Makinana		
Mr	TC	Makola	Municipal Mangaer	Nkangala District Municipality
Ms	B	Maleka	Manager: Integrated Development Planning	Steve Tshwete Local Municipality
Mr	Meshack	Malinga	MEC	Department of Agirculture, Rural Development and Land
Ms	Sibongile	Manana	MEC	Department of Community Safety, Security and Liaison
Mr	MT	Masango	Manager	Steve Tshwete Local Municipality
Mr	M	Mashaba		Dept of Water Affairs
Mr	Paris	Mashego	Secretary	National Mine Workers Union
Clr	SK	Mashilo	Executive Mayor	Nkangala District Municipality
	Madala	Masuku	Member of Executive Council	Dept of Public Works, Roads, & Transport: Mpumalanga
Mr	Steven	Mathetsa	Environmental Officer	Anglo Coal
Ms	Hlamarisa	Mavodze	Environmental Officer	MDEDET
Mr	Themba	Mavuso	Representative	National Union of Mine Workers
Mr	ZW	Meineka	Manager: Corporate Services	Nkangala District Municipality
Ms	Kama	Meso	Officer: Water Resources	Dept of Water Affairs
Mrs	Wendy	Mey	Process Manager	DTJV
Mr	Ian	Mey		Jonati Environmental Services
Clr	L E	Mkhuma	Councillor	Steve Tshwete Local Municipality
Mr	Benjamin	Moduka	Cultural Heritage Officer	Mpumalanga Heritage Resources Authority
Mr	M	Moloto		Department of Water Affairs
Ms	Gillian	Moloto		Lepelle Northern Water
Ms	Lindie	Moore	Env Specialist	DTJV
Mr	Fraser	Moore	Inspector	TUV
Mr	Lebona	Mosia	Head of Communications	Mpumalanga Provincial Government
	Lehlohonolo	Motloi		BHP Billiton
Mrs	Tshedi	Motloi		BHP Billiton
Mr	Lungile	Motsisi	Manager	Eskom Transmission Limited
Mr	Sipho	Mthethwa	Manager Public Participation	Steve Tshwete Local Municipality
Ms	Charity	Mthimunye	Environmental Officer	Dept of Land Affairs
Mr	Josiah	Mthimunye	Representative: NUM	Middelburg Colliery
Mr	Clifford	Mukansi	MEC	Department of Public Works, Roads & Transport : Mpumalanga
Dr	Cecil	Mutambanengwe		Digby Wells Environmental
Mr	Mashudu	Mutengwe	Assistant Director	Dept of Mineral Resources
Mrs	Nonofho	Ndobochani	Head Archaeologist	SAHRA

TITLE	NAME	SURNAME	POSITION	COMPANY
Mr	RP	Nelson	Landowner	Farm: Goedeheop & Rietfontein
Mr	Lucas	Nenghovhela	Environmental Manager	Optimum Coal
Mr	Aubrey	Nhlabathi		Samancor Chrome
Mr	Stephen	Nhlapo	Regional Chairman	National Union of Metal Workers
Ms	Marianna	Nieuwoudt	Coordinator	Olifants River Forum
Clr	S D	Nkadimeng	MMC for Human Settlement & Agriculture	Steve Tshwete Local Municipality
Mr	Jaco	Oosthuysen	Landowner	Jaco Oosthuysen Trust (Omnia Boerdery)
	Nhlanhla	Phakathi		Dept of Mineral Resources
Mr	Matjelele	Phaladi		Dept of Environmental Affairs
Ms	R	Pilodia	Councillor: Local Economic Development	Steve Tshwete Local Municipality
Ms	Annelien	Pretorius	Manager: Network Services	Eskom
Mr	Koos	Pretorius		Federation for Sustainable Environment: Mpumalanga
Mnr	Christoff	Prinsloo		Kanhym Landgoed
Mr	Zamile	Qwemesha	Director	Schwarz North Inc Attorneys
Mr	Jacob	Rabodila	Director General	Mpumalange Provincial Government
Ms	G G	Radise	Health & Environment Manager	Steve Tshwete Local Municipality
Mr	Preciouston	Raputsoa		Nkangala District Municipality
Mr	Erick	Ratshibvumo	Health & Environment Dept	Steve Tshwete Local Municipality
Mr	Nlteke	Risimate	Manager	Nkangala District Municipality
Mr	Andrew	Rossaak		WESSA : Lowveld Region
Mnr	Joppie	Sauerman	Grondeienaar: Surprise	Farm: Surprise Klipbank
Mr	Gerard	Scherman	Operations Manager: Polmaise Colliery	Alpha Coal
Mr	Peter	Schurr	Environmental & Legislative Manager	Columbus Stainless
Ms	Vicky	Shaw	Environmental Specialists	Exstrata Coal (XCSA)
Mr	KM	Skosana	Executive Manager	Steve Tshwete Local Municipality
Ms	Angela	Steenkamp	HOD Secretary/Capital Clerk	Anglo Thermal Coal
Mr	Gert	Stoltz	Fire Rescue and Disaster Manager	Steve Tshwete Local Municipality
Mrs	Careen	Swart		Department of Health : Mpumalanga
Mr	Kobus	Swart	Environment and Health Officer	Steve Tshwete Local Municipality
Mr	Andries	Thebe		Eskom Transmission
Mr	Fikile	Theledi	Director : Pollution Waste Management	MDEDET
Mr	JW	Trigol	Landowner	Farm: Goedeheop
Ms	Lizzy	Tshabalala	Manager Social Services	Nkangala District Municipality
Mr	Dineo	Tswai	Deputy Director : Environmental Impact Management	MDEDET
Mrs	Kelly	Tucker		Sivest
Dr	Anthony	Turton	Director	Water Institute of South Africa (WISA)
Mr	Tobie	van den Berg	Editor	Middelburg Observer/ Daller
Mr	CJ	Van Dyk	Landowner	
Mr	SM	Van Dyk	Landowner	
Mr	Marius	van Zyl	Environmental Scientist	Jones & Wagener
Mr	A	Venter		Dept of Health
Mrs	T	Viljoen	Landowner	Farm: Hartbeesfontein
Mr	FN	Viljoen	Landowner	Farm: Hartbeesfontein
Ms	Michelle	Viljoen	Sales & Marketing - Mpumalanga	ITT Water and Wastewater South Africa (Pty) Ltd
Mr	J	Visser	Landowner	Farm: Goedeheop
Mr	WJ	Vorster	Landowner	Farm: Hartbeesfontein
Mr	Piet	Wessels	Environmental Manager	DTJV
Ms	Michelle	Williams	Project Leader	DTJV
Clr	R M	Xaba	Speaker	Steve Tshwete Local Municipality
Mrs	Shirley	Xulu	Librarian	Middelburg Public Library
Ms	S	Xulu	Executive Manager	Steve Tshwete Local Municipality
Mr	Mike	Yorke-Hart	Project Manager	SANRAL



B.3 Background Information Document

BACKGROUND INFORMATION DOCUMENT

Environmental Impact Assessment for the Douglas Tavistock
Joint Venture's Proposed Middelburg Water Reclamation
Project
(MDEDET Ref No 17/2/3/N28 & DEA Ref No 12/9/11/L492/6)
February 2011



Public Participation Office

Nicolene Venter or Andrea Gibb
SiVEST Environmental
PO Box 2921, Rivonia, 2128
Tel: (011) 798 0600; Fax: (011) 803 772
E-mail: andreag@sivest.co.za
Website: www.sivest.co.za



Technical Enquiries about the EIA

Marius van Zyl
Jones & Wagener Consulting Civil Engineers
PO Box 1434, Rivonia, 2128
Tel: (011) 519 0200; Fax: (011) 519 0201
E-mail: vanzyl@jaws.co.za



Sien keersy vir Afrikaans.

Abbreviations

BECSA	BHP Billiton Energy Coal South Africa
BID	Background Information Document
DEA	Department of Environmental Affairs
DTJV	Douglas Tavistock Joint Venture
EA	Environmental Authorisation
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme (NEMA)
EMPR	Environmental Management Programme Report (MPRDA)
HiPRO®	High Recovery Precipitating Reverse Osmosis
I&AP	Interested and Affected Party
IWULA	Integrated Water Use Licence Application
IWWMP	Integrated Water and Waste Management Plan
MDEDET	Mpumalanga Department of Economic Development, Environment and Tourism
MPRDA	Minerals and Petroleum Resource Development Act
MWRP	Middelburg Water Reclamation Plant
NEMA	National Environmental Management Act
NWA	National Water Act
PPP	Public Participation Process
WMA	Water Management Area

Purpose of Document

The purpose of this Background Information Document (BID) is to provide interested and/or affected parties (IAPs) with information about the proposed Middelburg Water Reclamation Project (MWRP), a joint venture between BHP Billiton Energy Coal South Africa (BECSA) (Pty) Limited and Tavistock Collieries (Pty) Limited, called the Douglas Tavistock Joint Venture (DTJV).

Part of the project entails determining the potential environmental impacts associated with the MWRP in order to develop measures to minimise the potential negative impacts and enhance the positive ones. This will entail doing a detailed Environmental Impact Assessment (EIA) and developing a project specific Environmental Management Programme (EMPr) for the project. In addition an Integrated Water Use License (IWUL) is required for the project, which is to be supported by an Integrated Water and Waste Management Plan (IWWMP). Furthermore as per the Minerals and Petroleum Resources Development Act (MPRDA) an Environmental Management Programme Report (EMPR) amendment is required.

The environmental studies intend to fulfil specific fundamental objectives that include stakeholders' and public opinion, which is obtained through a Public Participation Process. The objectives of the Public Participation Process are to:

- exchange information between the proponent (DTJV) and Interested and Affected Parties (IAPs) in order for the proponent to investigate relevant aspects and make informed decisions regarding these;
- collate I&APs' issues and concerns to enable and enrich decision making by the relevant authorities;
- provide I&APs with an opportunity to comment on the findings of the specialist environmental studies.

The Douglas Tavistock Joint Venture (DTJV) appointed Jones & Wagener Consulting Civil Engineers to conduct the EIA and obtain all the required authorisations and licences for the MWRP. Specialists will be appointed to conduct the specialist studies, where required, in order to inform the EIA and other authorisation processes.

In order to participate in the public participation process, you are required to register as an I&AP. Refer to Registration Form attached to this document.

I&APs are invited to study this document and to provide the Public Participation Office (contact details on the last page) with any comments, issues, concerns and/or suggestions for enhanced benefits. All comments will be integrated into the environmental studies and recorded as part of an Issues and Response Report that will form part of the EIA documentation.

Background to the Proposed Middelburg Water Reclamation Project

Middelburg Mines (now known as Middelburg Colliery), comprising of the North and Klipfontein Sections, is located within the municipal area of Steve Tshwete Local Municipality, near the Town of Middelburg in the Mpumalanga Province. Middelburg falls within the Nkangala District Municipality. The area also forms part of the Upper Olifants River Water Management Area (WMA), which again forms part of the much larger Olifants River catchment, one of the major water supply systems of South Africa and Mozambique.

Middelburg Mines generates excess impacted mine water and the objective of the Middelburg Water Reclamation Project (MWRP) is to treat excess impacted mine water from the Hartebeesfontein, Goedehoop and Klipfontein sections to a suitable standard for release into the Spookspruit, a tributary of the Upper Olifants River catchment. The project is a joint venture between BHP Billiton Energy Coal South Africa (BECSA) (Pty) Limited and Tavistock Collieries (Pty) Limited, called the Douglas Tavistock Joint Venture (DTJV).

The DTJV has conducted a pre-feasibility study to determine the viability of constructing and operating a water treatment plant located on Middelburg Mines' North Section. The project is now at a definition phase study to determine its ultimate feasibility. The definition phase study includes the environmental authorisation processes, such as the required Environmental Impact Assessment.

The scope of this proposed project is to construct and operate a mine water reclamation scheme (see Figure 1). The proposed facility will comprise of:

- Mine water collection infrastructure to convey the mine affected water from various sources to the water treatment plant feed water dam;
- A mine water treatment plant based on the High Recovery Precipitating Reverse Osmosis (HiPRO[®]) process;
- Waste disposal facilities to manage the gypsum wastes produced by the treatment process; and
- Distribution infrastructure to convey the treated water fit for release into the catchment and/or re-use elsewhere at the mine.

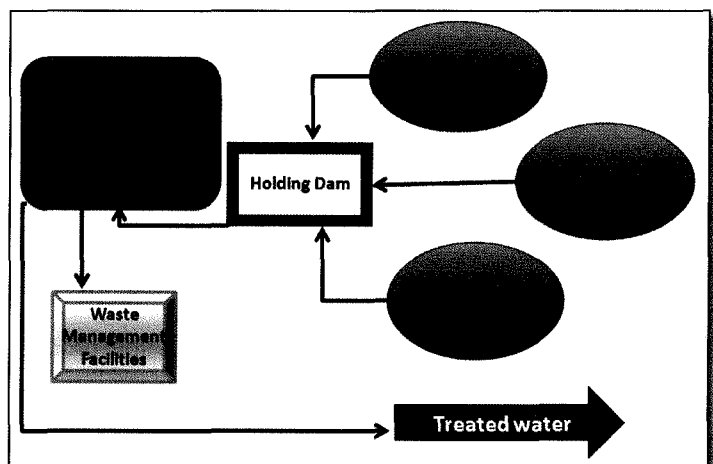


Figure 1: Components of a Mine Water Reclamation Scheme

The mine affected water will be collected from the existing impacted mine water management infrastructure and transferred via a network of pumps, pipelines, sumps and canals to the water treatment plant. The collection infrastructure will be constructed on mine property and will follow, as far as practically possible, existing service corridors such as conveyors, haul roads and servitudes.

The proposed water treatment process is based on the HiPRO[®] design developed by Keyplan, a division of the Aveng Group. The HiPRO[®] process uses membranes to remove salts from the pre-treated feed water followed by repeated precipitation and water extraction steps. Given the chemistry of the MWRP feed water, the process produces two treated water product streams, one meeting the catchment discharge requirements and the second meeting the quality for process water for re-use in coal processing facilities.

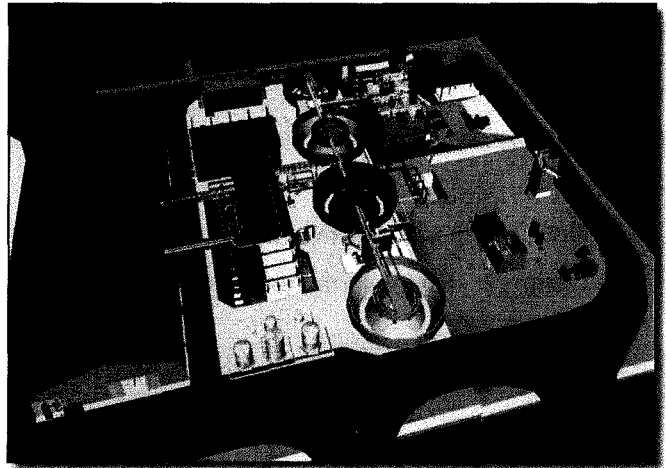


Figure 2: Three dimensional view of typical HiPRO[®] water treatment plant

Figure 2 provides a three dimension illustration of a typical HiPRO[®] water treatment plant.

The MWRP treatment process produces two waste streams, namely a metal-rich gypsum waste and a $\pm 95\%$ pure gypsum cake. Both gypsum streams potentially have commercial value and the DTJV aims to explore opportunities around the supply of these to the gypsum market in future.

In the interim, the metal-rich gypsum waste and the 95% gypsum cake will be disposed of in separate dedicated, specially engineered and licensed waste management facilities adjacent to the water treatment plant.

The treated water, meeting the interim catchment water resource quality objectives, will be discharged into the Spookspruit, a tributary of the Olifants River in the Upper Olifants River catchment, which feeds into the Loskop Dam. Prior to discharge, the water will be naturally aerated and a dissipation structure will be constructed to prevent significant erosion of the river bed. The second product water stream, of process water quality, will be transferred to the coal processing plant for re-use.

Other infrastructure that will be required for the project includes site offices, change houses, laboratory, sewerage works and other services, such as store and workshop facilities, security and access control, fencing and lighting, landscaping, roads and parking, storm water management, communications and information technology support, and the instrumentation and control of the mine water reclamation scheme.

The facility will be developed in two phases. The first phase will treat 15 ML/day (15 000 cubic metres per day) of mine water. Once the second phase is added, the capacity will be doubled to 30 ML/day. The electricity supply to the MWRP will be fed from Middelburg Mines' current network. The MWRP's installed power will be approximately 3.5 MW.

Location of the Proposed Project

Two options for the location of the plant are being considered as part of the investigatory process, namely:

- **Option 1:** On the farm Hartebeesfontein 315 IS, which is adjacent to the R575, and
- **Option 2:** On the farm Goedehoop 315 IS overlooking the Goedehoop Dam.

Figure 3 also indicates the proposed pipeline routes, which will be located on land belonging to Middelburg Mines.

It is envisaged that the proposed MWRP will have an initial footprint of approximately fifty (50) hectares and will expand, with the phase 2 additions, to approximately hundred (100) hectares.

Motivation for the Proposed Project

The main objective of the MWRP is to treat excess impacted mine water, currently not suitable for discharge to the environment, to a standard that is suitable for discharge. The MWRP will treat this water on behalf of the Middelburg Mines North and Klipfontein Sections (see Figure 3). The MWRP will be a separate entity owned by the Douglas Tavistock Joint Venture (DTJV).

Secondary to the main objective, the project will also be sustainable from an economic, social and institutional and environmental perspective, as follows:

- Reclamation of mine water to acceptable catchment standards improves the quality and quantity of water in the currently water stressed, Upper Olifants River Catchment for various uses;
- The discharge of the treated water into the catchment will support the local aquatic ecosystem and maintain a minimum base flow of good quality water in local streams;
- It may create temporary job opportunities during construction.

Relevant Environmental Authorisations

The DTJV needs to obtain all the required environmental authorisations before the MWRP can be constructed and commence operation. These authorisations are required to ensure that the project will not cause any negative impacts on the environment and ensure that it is operated within the intended specifications. The following is required:

- An authorisation in terms of the National Environmental Management Act's new EIA regulations, as promulgated on 18 June 2010 and effective as from 2nd of August 2010;
- An integrated water use license (IWUL) as required in terms of the provisions of the National Water Act (Act 36 of 1998) (NWA) for the MWRP and amendments of existing NWA licenses for the mines involved;
- License for the treatment of water and disposal of waste in terms of the provisions of the National Environmental Management: Waste Act (Act 59 of 2008) (NEM:WA);
- Heritage Impact Assessment in terms of the provisions of the National Heritage Resources Act (Act 25 of 1999);
- An EMPR amendment in terms of the Minerals and Petroleum Resource Development Act (Act 49 of 2008) (MPRDA).

Environmental Impact Assessment & Public Participation Process

What is an Environmental Impact Assessment?

Environmental Impact Assessments (EIAs) are used by developers (e.g. mining companies) and authorities to obtain an objective view of the potential environmental and social impacts that could arise during the construction, operation and closure of a proposed development, such as the development and operation of the proposed MWRP. This information must provide a sound basis for decision-making by the decision-making authority.

The end product of an EIA is an *Environmental Impact Report (EIR)*, which must:

- identify the potential impacts of the proposed development;
- record the issues, comments and/or concerns and suggestions raised by I&APs; and
- outline the measures that must be taken to avoid or reduce any negative impacts, and enhance positive impacts. The concerns and issues raised by the I&APs must also be addressed.

The steps of a typical EIA are outlined in Figure 4 below.

The Environmental Management Programme (EMPr) sets out measures to manage impacts identified during the EIA process for the construction and operational phases of the project.

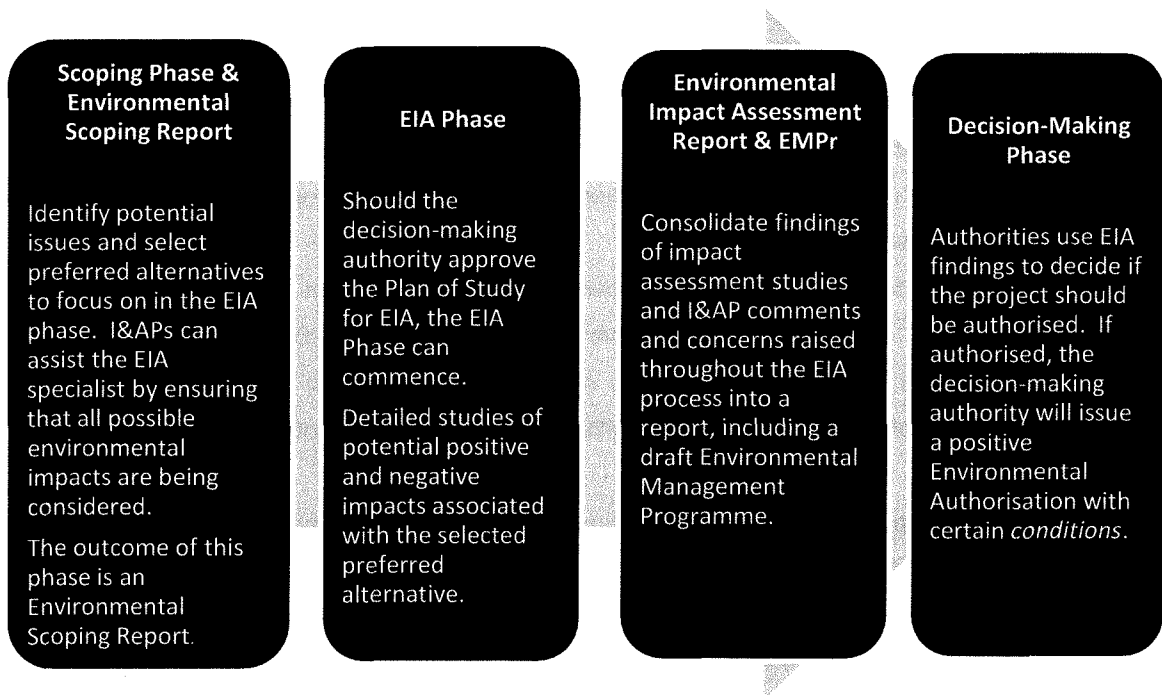


Figure 4: Environment Impact Assessment Process

Environmental Specialist Studies to be Undertaken

In order to identify how and where a project may impact on the environment, specialist studies are required to inform the EIA process, which includes the Public Participation Process. The following specialist studies have thus far been identified for the proposed MWRP:

- Heritage and cultural resources assessment;
- Biodiversity survey and assessment, including aquatics, wetlands, and fauna and flora;
- Ground water assessment (geohydrological assessment);
- Hydraulic impact assessment of the Spookspruit to the confluence with the Olifants River;
- Surface water quality impact assessment of the Spookspruit and the Loskop Dam;
- Reserve Determination
- Noise impact assessment;
- Air quality impact assessment;
- Geotechnical assessment;
- Socio-economic impact assessment;
- Traffic assessment.

The findings and recommendations made in the specialist studies will assist the technical team to propose measures to mitigate the negative impacts and enhance the positive ones. In addition, it will be used to develop the Environmental Management Programme (EMPr), which is required to ensure that all mitigatory and other environmental management measures are implemented and adhered to in order to protect the environment during the construction and operation of the MWRP.

Public Participation Process (PPP)

As part of the engagement process during the EIA, public meetings will be held. SiVEST has been appointed to manage the public participation process (PPP). Public participation is the cornerstone of any EIA, as it will be for this proposed project. The principles of NEMA govern many aspects of EIAs, including public participation.

The steps of a typical PPP is outlined in Figure 5 below

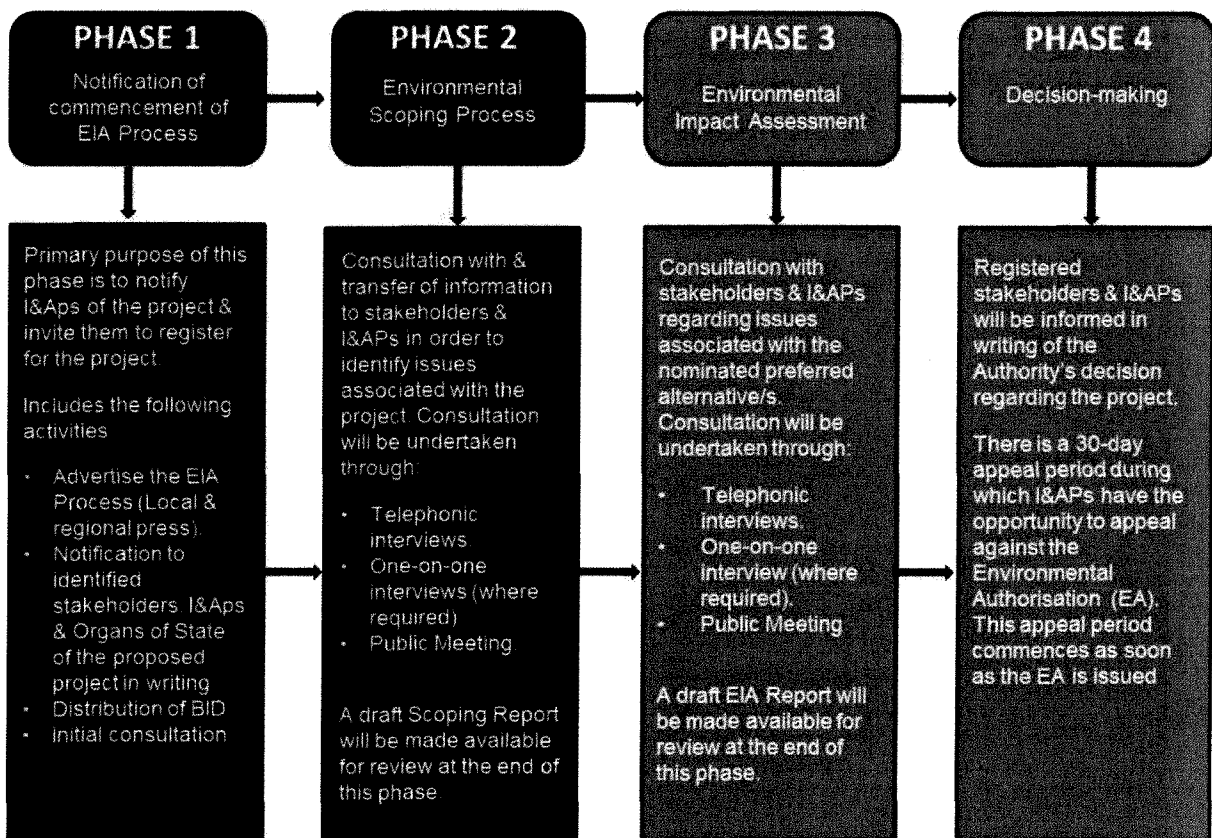


Figure 5: Steps that will be followed for the public participation process forming part of the EIA for the proposed MWRP

The key objective of public participation during this EIA will be to provide I&As with sufficient and transparent information on an on-going basis to ensure effective participation throughout the process. As part of this public participation process I&As will also be provided with the opportunity to comment on the findings of the Scoping and Impact Assessment Reports as well as the EMPr, which will be made available for public review during the process.

How to Participate in the PPP Process

Stakeholders are invited and urged to contact the EIA team about any concerns regarding the project by:

- Responding (by phone, fax or e-mail) to the invitation to participate in the PPP, as advertised in the printed media;
- Completing and forwarding (SA postal mail, fax or e-mail) the attached Registration and Comment Form to SiVEST;
- Attending the Public Meetings to be held during the course of the project;
- Contacting the PP Team telephonically regarding a query, comment or request for further project information;
- Reviewing the draft Reports within the 40-day review periods that will be stipulated in the advertisement as well as in personalised letters.

Your Responsibilities

You, as an I&AP, have a right to participate in this process by requesting further information or by informing the consultant of your concerns regarding the environment and the proposed Middelburg Water Reclamation Project. In terms of the EIA Regulations, your attention is drawn to your responsibilities as an I&AP:

- In order to participate in this EIA process, you **must** register yourself on the project database.
- Inform any other parties (neighbours, friends, colleagues, etc) who may be interested and/or affected by the proposed project about the EIA process and encourage them to become involved.
- Ensure that any comments regarding the proposed project are submitted within the timeframes that have been approved or set by the authorities, such as MDEDET, or within any extension of a timeframe agreed to by authorities and the applicant (i.e. DTJV).
- Disclose any direct business, financial, personal or other interest which you may have in the approval or refusal of the application for the proposed Middelburg Water Reclamation Project.

Our responsibilities as independent consultants

In terms of the EIA Regulations, our responsibilities in the public consultation process include:

- We must ensure that sufficient information regarding this proposed project is made available to you, either through the BID or providing information as and when requested.
- We must ensure that you have an understanding of the proposed project to be able to comment informatively and to enable you to submit any concern in an informed manner.
- We must ensure that the following actions are taken upon receiving any comments/queries/issues:
 - The contact details provided by you are entered into the project database and that you are sent all further information releases
 - If you send us queries or comments, we respond in writing
 - If you call us, your details and queries / comments are recorded. Should we not be able to answer your question immediately, your call will be returned as soon as possible with a response.

Who and How to Contact Us

SIVEST

**Environmental Division
51 Wessels Road, Rivonia, 2128
P O Box 2921, Rivonia. 2128**

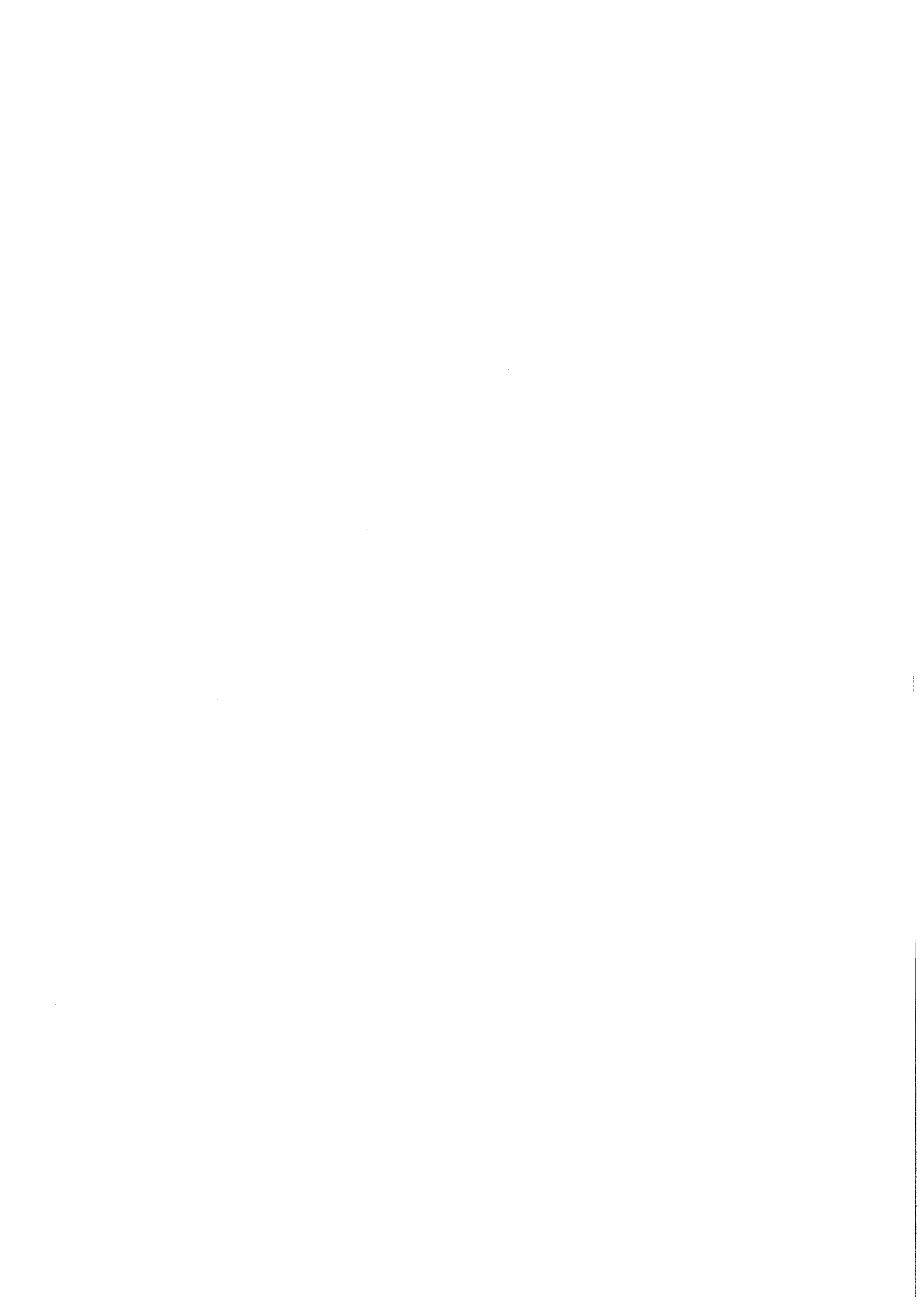
Contact persons: Nicolene Venter or Andrea Gibb

Phone: + 27 11 798 0600

Fax: + 27 11 803 7272

E- mail: andreag@sivest.co.za

Website : www.sivest.co.za



AGTERGROND- INLICHTINGS-DOKUMENT

Omgewingsimpakstudie vir die
Douglas Tavistock Gesamentlike Onderneming se
Voorgestelde Middelburg Waterherwinningsprojek
(MDEDET Verw no 17/2/3/N28 en DEA Verw no 12/9/11/L492/6)
Februarie 2011



Openbare Deelnamekantoor

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E-pos: vanzyl@jaws.co.za



See reverse side for English.

Afkortings

AID (BID)*	Agtergrondinligtingsdokument
B&GP (I&AP)*	Belangstellende en Geaffekteerde Party
BECSA	BHP Billiton Energy Coal South Africa (Edms) Bpk
DTJV	DouglasTavistock Gesamentlike Onderneming
DEA	Departement van Omgewingsake
NOBW (NEMA)*	Nasionale Omgewingsbestuurswet
GWGL (IWUL)*	Geïntegreerde Watergebruiklisensie
GWABP (IWWMP)*	Geïntegreerde Water- en Afvalbestuursplan
HIPRO[®]	Hoë Herwinning Presipiterende Omgekeerde-osmose (High Recovery Presipitating Reverse Osmosis)
MDEDET	Mpumalanga Departement Ekonomiese Ontwikkeling, Omgewing en Toerisme
MPHOW (MPRDA)*	Minerale en Petroleum Hulpbron Ontwikkelingswet
MWHP (MWRP)*	Middelburg Waterherwinningsprojek
NWW (NWA)*	Nasionale Waterwet
OBPr (EMPr)*	Omgewingsbestuurprogram
OBPV (EMPR)*	Omgewingsbestuurprogram Verslag (MPRDA)
ODP (PPP)*	Openbaredeelneproses
OIS (EIA)*	Omgewingsimpakstudie
OM (EA)*	Omgewingsmagtiging
WBG (WMA)*	Water Bestuursgebied

* Die akroniem in hakkies is die algemeen gebruikte term en het sy oorsprong vanuit Engels.
Engelse akronieme word deurgans in die dokument gebruik

Doel van Dokument

Die doel van hierdie Agtergrondinligtingsdokument (BID) is om Belangstellende en/of Geaffekteerde partye (I&APs) van inligting te voorsien oor die voorgestelde Middelburg Waterherwinningsprojek (MWRP). Die MWRP is 'n gesamentlike onderneming tussen BHP Billiton Energy Coal South Africa (Edms) Bpk. (BECSA) en Tavistock Collieries (Edms) Bpk., wat as die Douglas Tavistock Gesamentlike Onderneming (DTJV) bekend staan.

'n Gedeelte van die projek behels om vas te stel wat die omgewingsimpakte is wat met die MWRP gepaardgaan ten einde maatreëls te ontwikkel om die potensiële negatiewe impakte te minimaliseer en om die positiewe impakte te versterk. Dit sal behels om 'n gedetailleerde Omgewingsimpakstudie (EIA) uit te voer en 'n projekspesifieke Omgewingsbestuursprogram (EMPr) vir die projek te ontwikkel. Daarbenewens word 'n Geïntegreerde Watergebruiklisensie (IWUL) vir die projek verlang, wat deur 'n Geïntegreerde Water- en Afvalbestuursplan (IWWMP) gesteun moet word. Voorts, soos vervat in die Minerale en Petroleum Hulpbron Ontwikkelingsweg (MPRDA) is dit 'n vereiste dat die Omgewingsbestuursprogram Verslag (EMPR) gewysig moet word.

Die doel van die omgewingstudies is om spesifieke fundamentele doelwitte te vervul, wat belanghebbende en openbare menings insluit wat by wyse van 'n Openbare Deelnameproses ingewin sal word. Die doelwitte van die Openbare Deelnameproses is om:

- inligting tussen die proponent (DTJV) en I&APs uit te ruil sodat die proponent tersaaklike aspekte kan ondersoek en ingeligte besluite hieroor kan neem;
- kwessies en knelpunte saam te vat om besluitneming deur die tersaaklike owerhede moontlik te maak; en
- I&APs 'n geleentheid te bied om kommentaar te lewer oor die bevindinge van die spesialis-omgewingstudies.

Die DTJV het Jones & Wagener Raadgewende Siviele Ingenieurs aangestel om die EIA uit te voer en al die nodige magtigings en lisensies vir die MWRP te bekom. Spesialiste sal aangestel word om, waar dit vereis word, die spesialis ondersoeke uit te voer, ten einde die EIA en ander magtigingsprosesse toe te lig.

Ten einde aan die openbare deelnameproses deel te neem, word van u verlang om as 'n I&AP te registreer deur die Registrasievorm wat by hierdie dokument aangeheg is in te vul.

I&Aps word uitgenooi om hierdie dokument te bestudeer en enige kommentaar, vraagstukke, knelpunte en/of voorstelle vir verbeterde besluitneming aan die Openbare Deelnamekantoor (kontakbesonderhede op die laaste bladsy) te stuur.

Alle kommentaar sal in die omgewingstudies vervat en aangeteken word as deel van 'n Vraag- en Antwoordverslag wat deel van die EIA-dokumentasie sal vorm.

Agtergrond tot die Voorgestelde Middelburg Waterherwinningsprojek

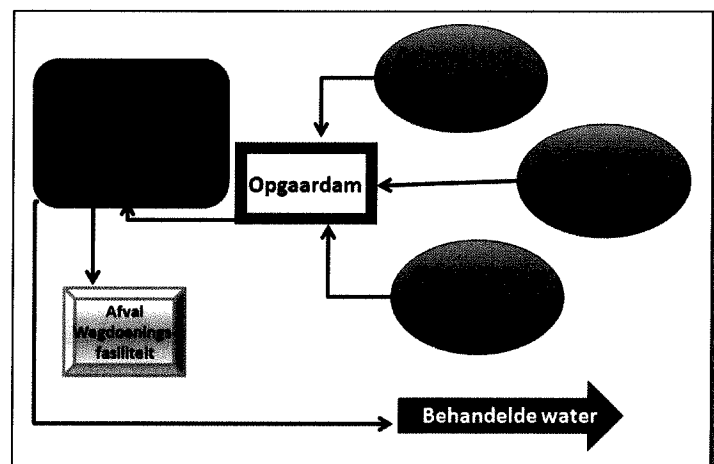
Middelburg Myn (nou bekend as Middelburg Steenkoolmyn), wat uit die Noord- en Klipfonteinseksies bestaan, is geleë binne die munisipale gebied van die Steve Tshwete Plaaslike Munisipaliteit naby Middelburg in die Mpumalanga Provinsie. Middelburg val binne die Nkangala Distriksmunisipaliteit. Die gebied vorm ook deel van die Bo-Olifantsrivier Waterbestuursgebied (WMA), wat op sy beurt deel vorm van die veel groter Olifantsrivier-opvangsgebied; een van Suid-Afrika en Mosambiek se groot watervoorsieningstelsels.

Middelburg Myn genereer 'n oormaat geïmpakteerde mynwater en die oogmerk van die Middelburg Waterherwinningsprojek (MWRP) is om die oortollige besoedelde mynwater van die Hartebeesfontein, Goedehoop en Klipfontein-seksies te behandel tot 'n geskikte standaard om in die Spookspruit, 'n sytak van die Bo-Olifantsrivieropvangsgebied, te laat invloei. Die projek is 'n gesamentlike onderneming tussen BHP Billiton Energy Coal South Africa (Edms) Bpk en Tavistock Collieries (Edms.) Bpk, en staan as die Douglas Tavistock Gesamentlike Onderneming (DTJV) bekend.

Die DTJV het 'n voorlopige uitvoerbaarheidstudie onderneem om die lewensvatbaarheid vir die konstruksie en bedryf van 'n waterbehandelingsaanleg te Middelburg Myn se Noordelike gedeelte vas te stel. Die projek is tans in 'n definisiefase om die uiteindelijke uitvoerbaarheid daarvan te bepaal. Die definisiefase sluit die omgewingsmagtigingsprosesse, soos die vereiste EIA, in.

Die omvang van hierdie voorgestelde projek is om 'n mynwaterherwinningskema op te rig en te bedryf (sien Figuur 1). Die voorgestelde aanleg sal bestaan uit:

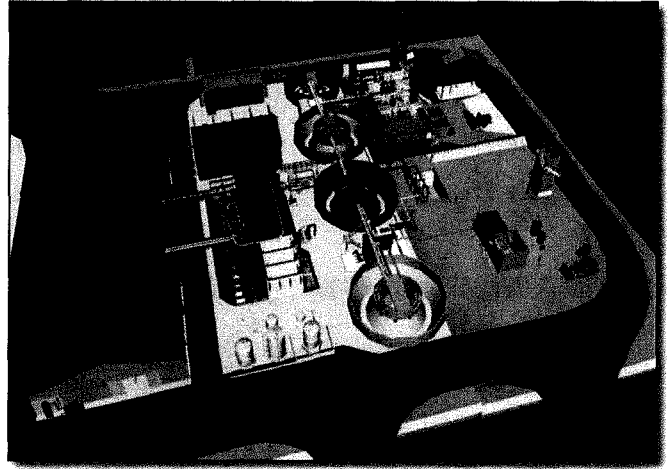
- infrastruktuur om die geïmpakteerde mynwater van verskeie bronne na die waterbehandelingsaanleg se toevoer-waterdamme te pomp;
- 'n mynwaterbehandelingsaanleg wat op die Hoë Herwinning Presipiterende Omgekeerde-osmose (HiPRO[®]) proses gebaseer is;
- afvalwegdoenings fasiliteite om die gipsafval-produkte wat uit die behandelingsproses voortspruit te akkomodeer; en
- infrastruktuur om die behandelde water te versprei met pyplyne vir vrylating in die opvangsgebied en/of hergebruik elders by die myn.



Figuur 1: Komponente van die mynwater-herwinningskema

Die geaffekteerde mynwater sal in die bestaande geïmpakteerde water bestuursinfrastruktuur opgevang word en deur 'n netwerk van pompe, pyplyne, sinkputte en kanale na die waterbehandelingsaanleg herlei word. Die water versamelings- en vervoerstelsels sal op myneïendom opgerig word en sal, sover prakties moontlik, bestaande dienslewings deurgange soos vervoerbande, karweipaaie en serwitute volg.

Die voorgestelde waterbehandelingsproses is gegrond op die HiPRO[®] ontwerp wat deur Keyplan, 'n afdeling van die Aveng Group ontwikkel is. Die HiPRO[®] proses maak van membrane gebruik om soute uit die reedsbehandelde toevoerwater te verwyder, wat deur herhaalde presipitering- en waterherwinning-stappe opgevolg word. Gegewe die chemiese samestelling van die MWRP toevoerwater, word twee behandelde waterproduktstrome deur die proses geproduseer; een wat aan die vereistes vir die opvangsgebied voldoen en die tweede wat aan die gehalte voldoen vir proseswater vir hergebruik in die myn se steenkoolverwerkingsaanlegte.



Figuur 2: Driedimensionele aansig van 'n tipiese HiPRO[®] waterbehandelingsaanleg

Figuur 2 is 'n driedimensionele illustrasie van 'n tipiese HiPRO[®] waterbehandelingsaanleg.

Die MWRP behandelingsproses produseer twee afvalstrome, naamlik 'n metaalryke gipsafval en 'n $\pm 95\%$ suiwer gipskoek. Albei gips afvalprodukte het potensiële kommersiële waarde en die DTJV poog om geleenthede te ondersoek rondom die toekomstige verskaffing hiervan aan die gipsmark.

Tot tyd en wyl 'n mark vir die hergebruik gevind word sal daar met die metaalryke gipsafval en die 95% gipskoek weggedoen word in aparte spesifiek ontwerpte en gelisensieerde afvalfasiliteite wat naasliggend aan die MWRP geleë sal wees.

Die behandelde water wat aan die gehaltesdoelwitte van die korttermyn opvangsgebied-waterhulpbron standaard sal voldoen, sal in die Spookspruit, 'n sytak van die Olifantsrivier in die Bo-Olifantsrivieropvangsgebied gestort word. Die Bo-Olifantsrivier voed die Loskopdam. Voor storting sal die water natuurlik belug word en 'n water vloeispoed-verminderingstruktuur sal opgerig word om erosie van die rivierwalle en -bodem te voorkom. Die tweede water produkstroom van proseswatergehalte, sal na die steenkoolverwerkingsaanleg versprei word vir hergebruik.

Ander infrastruktuur wat vir die projek verlang sal word sluit kantore, ablusiegeboue, laboratorium, rioolwerke en ander dienste, soos berging- en werkswinkelfasiliteite, sekuriteit en toegangsbeheer, heinings en beligting, tuine, paaie en parkering, stormwaterbestuurstelsel, kommunikasie en inligtingstegnologiesteun, asook die instrumentasie en beheer van die waterherwinningskema in.

Die aanleg sal in twee fases ontwikkel word. Die eerste fase sal 15 ML/dag (15 000 kubieke meter per dag) mynwater behandel. Sodra die tweede fase bykom, sal die kapasiteit verdubbel tot 30 ML/dag. Die elektrisiteitsvoorsiening aan die MWRP sal uit Middelburg Myn se huidige netwerk verkry word. Die MWRP se geïnstalleerde krag sal ongeveer 3.5 megawatt wees.

Ligging van die Voorgestelde Projek

Twee opsies vir die ligging van die aanleg word as deel van die ondersoekproses oorweeg, naamlik:

- **Opsie 1:** Op die plaas Hartebeesfontein 315 IS, wat langs die R575 geleë is; en
- **Opsie 2:** Op die plaas Goedehoop 315 IS wat oor die Goedehoopdam uitkyk.

Figuur 3 dui ook die voorgestelde pyplynroetes aan, wat op Middelburg Myn eiendom is.

Daar word in die vooruitsig gestel dat die voorgestelde MWRP 'n aanvanklike area van ongeveer vyftig (50) hektaar in beslag sal neem, wat met die Fase 2 uitbreidings tot ongeveer 'n honderd (100) hektaar sal vergroot.

Motivering vir die Voorgestelde Projek

Die hoofdoel van die MWRP is om oortollige besoedelde mynwater, wat tans nie geskik is om in die omgewing te stort nie, te behandel tot 'n standaard wat geskik is vir storting. Die MWRP sal hierdie water namens Middelburg Myn se Noord- en Klipfontein Gedeeltes behandel (sien Figuur 3). Die MWRP sal 'n aparte entiteit wees wat deur die DTJV besit word.

Sekondêr tot die hoofdoel, sal die projek ook vanuit 'n ekonomiese, maatskaplike en institusionele en omgewingsperspektief volhoubaar wees soos volg:

- Die herwinning van mynwater tot aanvaarbare opvanggebied standarde verbeter die gehalte en hoeveelheid van die water vir verskeie gebruike in die Bo-Olifantsrivieropvangsgebied wat tans onder 'n waterskaarste gebuk gaan;
- Die storting van die behandelde water in die opvangsgebied sal die plaaslike akwatiese-ekostelsel steun en 'n minimum basisvloei van goeie gehalte water in plaaslike strome in stand hou; en
- Dit kan tydelike werksgeleenthede skep tydens konstruksie.

Tersaaklike Omgewingsmagtigings

Die DTJV moet al die nodige omgewingsmagtigings verkry alvorens die MWRP opgerig en bedryf kan word. Hierdie magtigings word verlang om te verseker dat die projek nie enige negatiewe impakte op die omgewing sal veroorsaak nie en om te verseker dat dit binne die beoogde spesifikasies bedryf word. Die volgende magtigings word verlang:

- 'n Magtiging ingevolge die Nasionale Wet op Omgewingsbestuur (NEMA) se nuwe EIA-regulasies, soos afgekondig op 18 Junie 2010 met inwerkingtreding vanaf 2 Augustus 2010;
- 'n Geïntegreerde watergebruiklisensie soos verlang ingevolge die bepalings van die Nasionale Waterwet (Wet 36 van 1998) (NWA) vir die MWRP en wysigings van bestaande NWA-lisensies vir die betrokke myne;
- 'n Lisensie vir die behandeling van water en wegdoening van afval ingevolge die bepalings van die Nasionale Wet op Omgewingsbestuur: Afval (Wet 59 van 2008) (NEM:WA); en
- 'n Erfenisimpakstudie ingevolge die bepalings van die Nasionale Wet op Erfenishulpbronne (Wet 25 van 1999);
- 'n EMPR wysiging in terme van die Minerale en Petroleum Hulpbron Ontwikkelingswet (Wet 49 van 2008) (MPRDA).

Omgewingsimpakstudie & Openbare Deelnameproses

Wat is 'n Omgewingsimpakstudie?

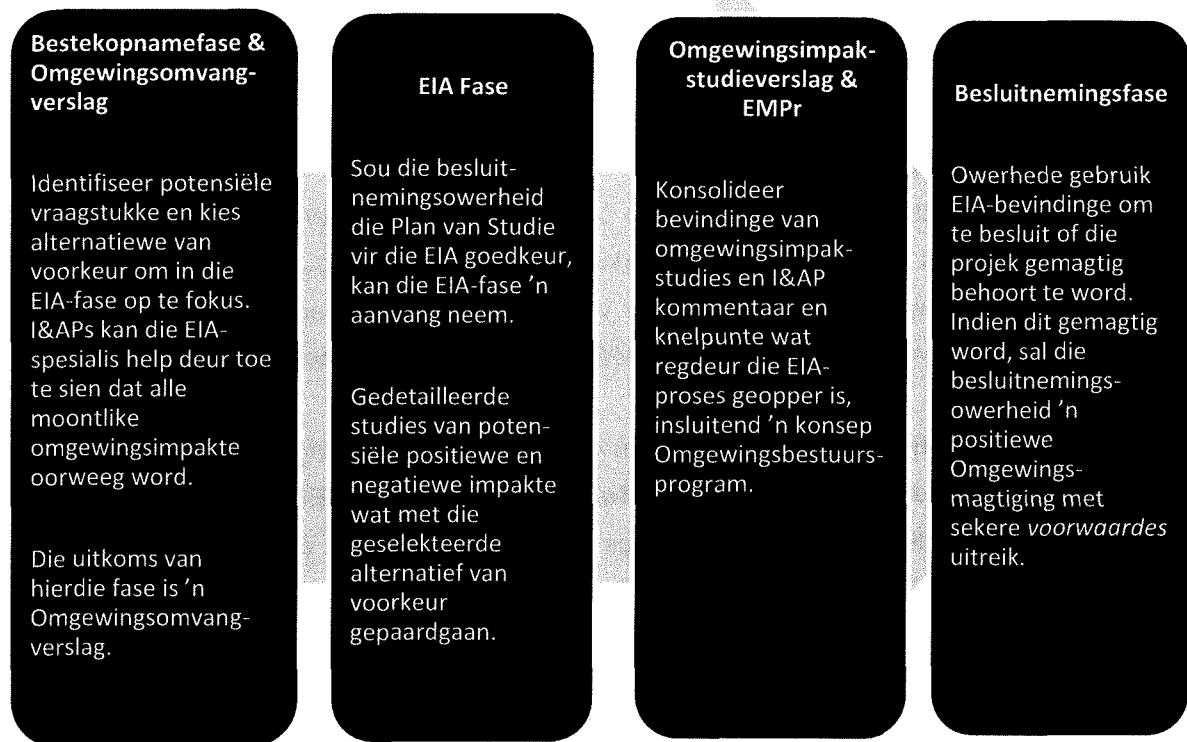
Omgewingsimpakstudies (EIA's) word deur ontwikkelaars (bv. mynmaatskappye) en owerhede gebruik om 'n objektiewe siening te verkry van die potensiele omgewings- en maatskaplike impakte wat kan voortspruit uit die oprigting, bedryf en sluiting van 'n voorgestelde ontwikkeling, soos die ontwikkeling en bedryf van die voorgestelde MWRP. Hierdie inligting moet 'n deeglike grondslag bied vir besluitneming deur die besluitnemingsowerheid.

Die eindproduk van 'n EIA is 'n *Omgewingsimpakverslag* wat die volgende moet doen:

- Die potensiele impakte van die voorgestelde ontwikkeling identifiseer;
- die vraagstukke, kommentaar en/of knelpunte en voorstelle wat deur I&APs geopper word, aanteken; en
- die maatreëls beskryf wat geneem moet word om enige negatiewe impakte te vermy of te verminder en positiewe impakte te versterk. Die knelpunte en vraagstukke wat deur die I&APs geopper word, moet ook aangespreek word.

Die stappe van 'n tipiese EIA word in Figuur 4 hieronder beskryf.

Die Omgewingsbestuursprogram (EMPr) beskryf maatreëls om impakte wat tydens die EIA-proses vir die oprigting en bedryfsfases van die projek geïdentifiseer is, te bestuur.



Figuur 4: Omgewingsimpakstudieproses

Spesialis Omgewingstudies wat onderneem moet word

Ten einde te identifiseer hoe en waar 'n projek 'n impak op die omgewing kan hê, word spesialisstudies verlang om die EIA-proses, wat die Openbare Deelnameproses insluit, toe te lig. Die volgende spesialisstudies is tot dusver vir die voorgestelde MWRP geïdentifiseer:

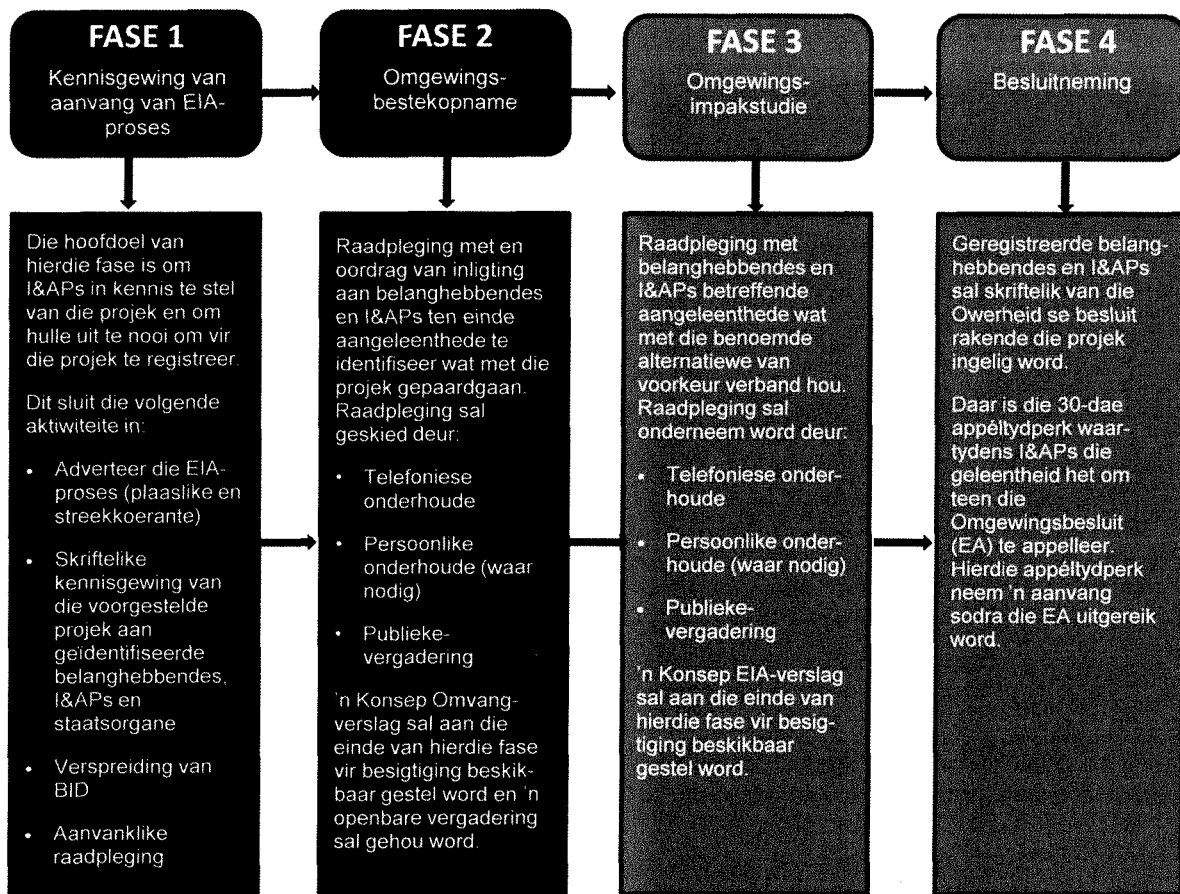
- Erfenis- en kultuurhulpbronstudie
- Biodiversiteitopname en -studie, insluitend water, vleilande, fauna en flora
- Grondwaterstudie (geohidrologiese evaluering)
- Hidroliese impakstudie van die Spookspruit tot by die samevloeiing van die Olifantsrivier
- Impakstudie van die oppervlak watergehalte van die Spookspruit en Loskopdam
- Vasstelling van oppervlak waterreserwe
- Geraasimpakstudie
- Luggehalte-impakstudie
- Geotegniese ondersoeke
- Sosio-ekonomiese impakstudie
- Verkeer

Die bevindinge en aanbevelings wat in die spesialisstudies gemaak word, sal die tegniese span help om maatreëls voor te stel wat die negatiewe impakte sal versag en die positiewe impakte te versterk. Daarbenewens sal dit gebruik word om die Omgewingsbestuursprogram (EMPr) te ontwikkel, wat verlang word om te verseker dat alle versagende en ander omgewingsbestuursmaatreëls geïmplementeer en aan voldoen word, ten einde die omgewing tydens die konstruksie- en bedryf van die MWRP te beskerm.

Openbare Deelnameproses (PPP)

Openbare vergaderings sal as deel van die openbare deelnameproses (PPP) tydens die EIA gehou word en SiVEST is aangestel om die PPP te bestuur. Openbare deelname is die hoeksteen van enige EIA, soos ook die geval is vir hierdie voorgestelde projek. Die beginsels van die NEMA beheer baie aspekte van EIA's, insluitend openbare deelname.

Die stappe van 'n tipiese Openbare Deelnameproses word in Figuur 5 hieronder beskryf.



Figuur 5: Stappe wat vir die Openbare Deelnameproses gevolg sal word, vorm deel van die EIA vir die voorgestelde MWRP

Die hoofdoel van openbare deelname gedurende hierdie EIA sal wees om I&APs op deurlopende basis te voorsien van toereikende en deursigtige inligting om doeltreffende deelname regdeur die proses te verseker. As deel van hierdie openbare deelnameproses sal I&APs ook die geleentheid gebied word om kommentaar te lewer oor die bevindinge van die Bestekopname- en

Impakstudieverslae, asook die EMPr, wat tydens die proses vir publieke hersiening beskikbaar gestel sal word.

Hoe om aan die Openbare Deelnameproses deel te neem

Belanghebbendes word uitgenooi en aangemoedig om die EIA-span oor enige knelpunte rakende die projek te kontak deur:

- te reageer (telefonies, per faks of e-pos) op die uitnodiging om deelname aan die openbare deelnameproses, soos in die pers geadverteer is;
- die aangehegte Registrasie- en Kommentaarvorm in te vul en per SA pos, faks of e-pos aan SiVEST te stuur;
- die Openbare Vergaderings by te woon wat gedurende die verloop van die projek gehou sal word;
- die Openbare Deelname-span telefonies te kontak met navrae, kommentaar of versoek vir verdere projekinligting;
- die konsepverslae tydens die 40-dae hersieningstydperke wat in die advertensie en persoonlike briewe aangedui sal word, te besigtig.

U verantwoordelikhede

As 'n I&AP het u die reg om aan hierdie proses deel te neem deur verdere inligting te versoek of deur die konsultant van u knelpunte betreffende die omgewing en die voorgestelde Middelburg Waterherwinningsprojek te verwittig. Ingevolge die EIA-regulasies word u aandag gevestig op u verantwoordelikhede as 'n I&AP:

- Ten einde aan hierdie EIA-proses deel te neem moet u uself op die projek se databasis registreer.
- Verwittig enige ander partye (bure, vriende, kollegas, ens.) wat in die voorgestelde projek mag belangstel en/of daardeur geraak word van die EIA-proses en moedig hulle aan om betrokke te raak.
- Verseker dat enige kommentaar betreffende die voorgestelde projek ingedien word binne die tydraamwerke wat goedgekeur of deur die owerhede, soos MDEDET, opgestel is, of binne enige verlenging van 'n tydraamwerk waaroor deur die owerhede en die applikant (d.i. DTJV) ooreengekom is.
- Maak enige regstreekse sake, finansiële, persoonlike of ander belang wat u mag hê in die goedkeuring of weiering van die aansoek vir die voorgestelde Middelburg Waterherwinningsprojek bekend.

Ons verantwoordelikhede as onafhanklike konsultante

Ingevolge die EIA-regulasies sluit ons verantwoordelikhede in die openbare raadplegingsproses die volgende in:

- Ons moet verseker dat genoemde inligting betreffende hierdie voorgestelde projek aan u beskikbaar gestel word, hetsy deur die BID of deur inligting te verskaf soos en wanneer dit versoek word.
- Ons moet toesien dat u 'n begrip vorm van die voorgestelde projek ten einde insiggewende kommentaar te lewer en om u in staat te stel om enige knelpunt op ingeligte wyse in te dien.
- Ons moet toesien dat die volgende aksies plaasvind wanneer enige kommentaar / navrae / vraagstukke ontvang word:
- Die kontakbesonderhede wat deur u verskaf word, moet in die projek se databasis ingevoer word en alle verdere inligtingstukke moet aan u gestuur word.
- Indien u navrae of kommentaar aan ons stuur, moet ons skriftelik daarop reageer.
- Indien u ons skakel, moet u besonderhede en navrae/kommentaar aangeteken word. Sou ons nie dadelik in staat wees om u vraag te beantwoord nie, sal u vraag so gou moontlik beantwoord word.

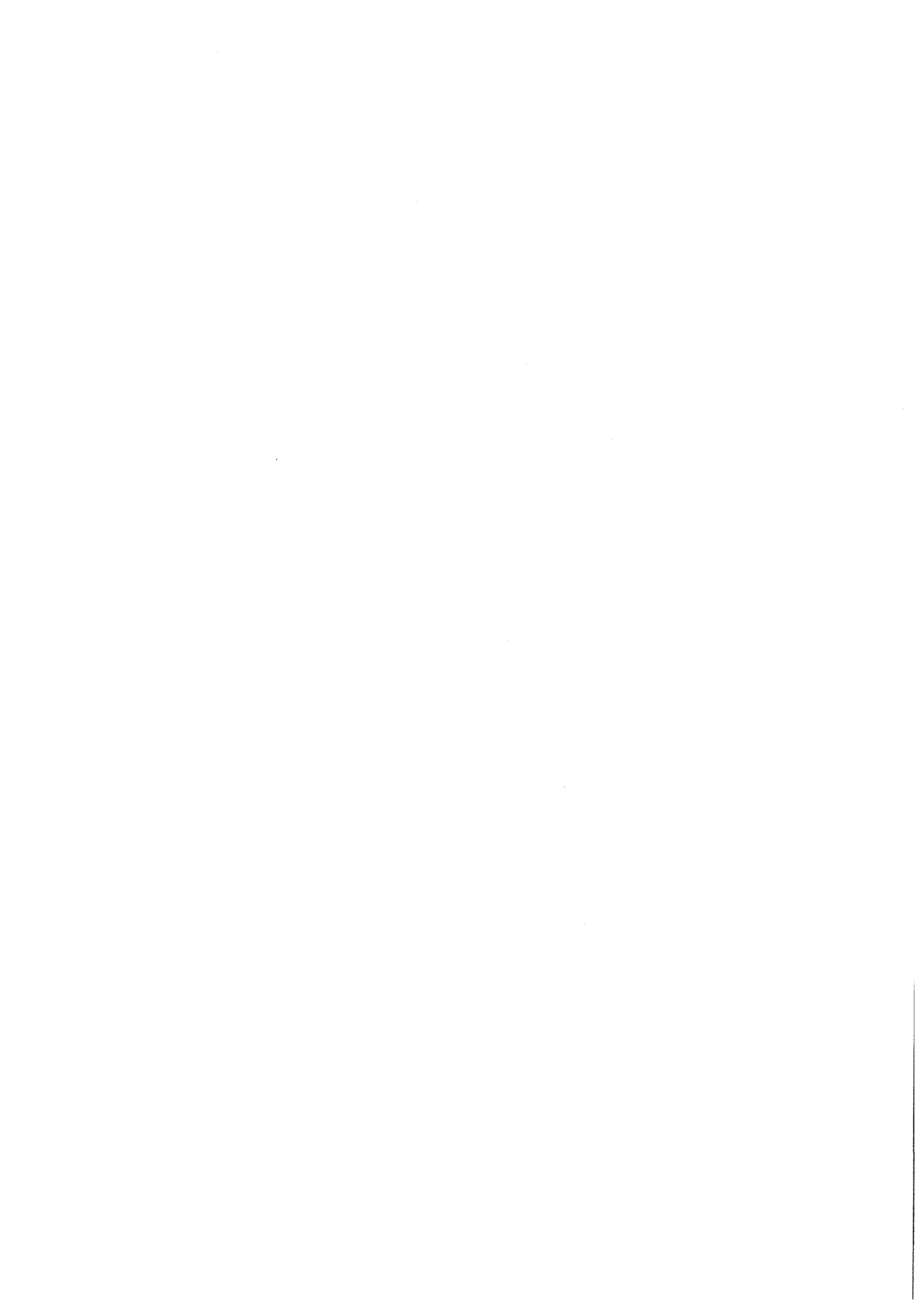
Wie om te kontak en hoe

SIVEST

Omgewingsafdeling
Wesselsweg 51, Rivonia, 2128
Posbus 2921, Rivonia. 2128

Kontakpersone: Nicolene Venter of Andrea Gibb

Telefoon: +27 11 798 0600
Faks: +27 11 803 7272
E-pos: andreag@sivest.co.za
Webwerf: www.sivest.co.za





**ENVIRONMENTAL IMPACT ASSESSMENT FOR
THE DOUGLAS TAVISTOCK JOINT VENTURE'S
(DTJV) PROPOSED MIDDELBURG WATER
RECLAMATION PROJECT (MWRP),
MIDDELBURG, MPUMALANGA PROVINCE**

**(MDEDET Ref No: 17/2/3/N28 and DEA Ref No:
12/9/11/L492/6)**

**REGISTRATION AND COMMENT FORM
Accompanying Background Information
Document
February 2011**

Public Participation Office



Nicolene Venter/Andrea Gibb
SiVEST Environmental
PO Box 2921, RIVONIA, 2128
Tel (011) 798 0600
Fax (011) 803 7272
Email andreag@sivest.co.za

Please complete and return by post, fax or e-mail to the Public Participation Office (as above) by FRIDAY 11 MARCH 2011

TITLE		FIRST NAME	
INITIALS		SURNAME	
ORGANISATION			
POSTAL ADDRESS			
		POSTAL CODE	
TEL NO		FAX NO	
CELL PHONE NO			
E-MAIL ADDRESS			

REGISTRATION AS INTERESTED AND AFFECTED PARTY (I&AP) (please circle applicable box)

Please formally register me as an interested and affected party (I&AP) so that I may receive further information and notifications during the EIA process	YES	NO
I would like my notifications by* *Please tick the appropriate box	Letter (mail)	
	E-mail	
	Fax	
	Telephone (Telkom / Cellular)	
I would like to receive documents for comment as follows* * Please tick the appropriate box	Paper copies	
	By e-mail	
	On CD	
In terms of GNR 543 (Regulation 56 (1)(c)) (EIA process regulations) I disclose below any direct business, financial, personal or other interest that I may have in the granting or rejection of the application for environmental authorisation:		

COMMENTS (please use separate sheets if you wish)

I suggest that the following issues of concern be investigated in the EIA:

.....
.....

I suggest the following for the EIA process and / or the public participation process:

.....
.....

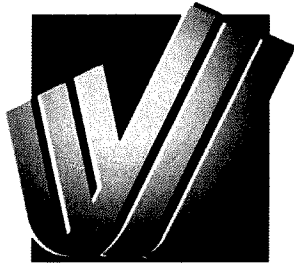
Please contact the following colleagues/friends to register as I&APs for this EIA (name and contact details e.g. e-mail address):

.....
.....

THANK YOU FOR YOUR CONTRIBUTION

Signature

Date



OMGEWINGSIMPAKSTUDIE VIR DIE DOUGLASS-TAVISTOCK GESAMENTLIKE ONDERNEMING (DTJV) SE VOORGESTELDE MIDDELBURG WATERHERWINNINGSPROJEK (MWRP), MIDDELBURG, MPUMALANGA PROVINSIE

(MDEDET Verw No: 17/2/3/N28 en
DEA Verw No: 12/9/11/L492/6)

REGISTRASIE EN KOMMENTAARVORM
Bykomend tot die
Agtergrondinligtingsdokument
Februarie 2011

Openbare Deelnamekantoor



Nicolene Venter/Andrea Gibb
SiVEST Environmental
Posbus 2921, RIVONIA, 2128
Tel (011) 798 0600
Faks (011) 803 7272
E-pos andreag@sivest.co.za

Volgoi asb en stuur terug per pos, faks of e-pos aan die Openbare Deelnamekantoor (soos hierbo) voor of op VRYDAG 11 MAART 2011

TITEL		NOEMNAAM	
VOORLETTERS		VAN	
ORGANISASIE			
POSADRES		POSKODE	
TEL NO		FAKS NO	
SELFOONNO.			
E-POS ADRES			

REGISTRASIE AS BELANGHEBBENDE EN GEAFFEKTEERDE PARTY (I&AP) (omkring toepaslike antwoord)

Registreer my asseblief formeel as 'n belanghebbende en geaffekteerde party (I&AP) om te verseker dat veredere inligting en kennisgewings gedurende die EIA aan my gestuur word	JA	NEE
Ek verkies my kennisgewings per*	Brief (per pos)	
	e-pos	
	Faks	
*Dui asb u keuse aan met ✓	Telefoon (Telkom / Sellulêr)	
Ek sal graag projek dokumente soos volg wil ontvang*	Harde kopie	
	Per e-oos	
* Dui asb u keuse aan met ✓	Op CD	
In terme GNR 543 (Regulasie 56 (1)(c)) (EIA proses regulasies)verklaar ek hieronder enige direkte besigheid, finansiële, persoonlike of enige ander belang wat ek mag hê in die toestaan of weiering van die Omgewingsmagtiging Aansoek:		
.....		
.....		

KOMMENTAAR (u is welkom om 'n addisionele bladsy te gebruik, indien verkies)

Ek stel voor dat die volgende kwessies of kwellinge tydens die EIA ondersoek word:

.....

.....

Ek stel die volgende voor vir die EIA proses en / of die publieke deelnameproses:

.....

.....

Kontak asseblief die volgende kollegas/vriende om as 'n I&AP te registreer (naam en kontakligting bv e.g. e-pos adres):

.....

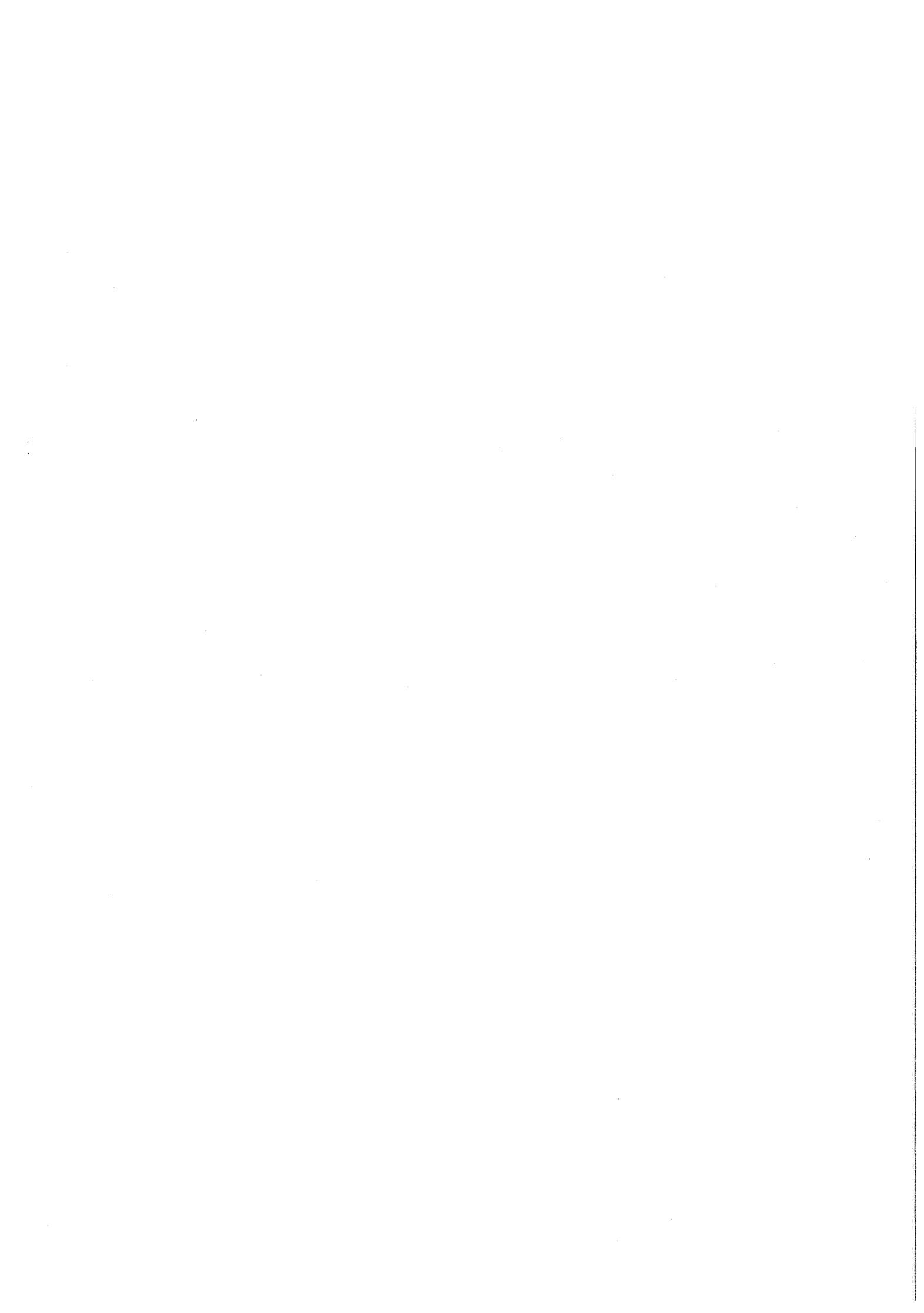
.....

Handtekening

DANKIE VIR U DEELNAME

Datum

B.4 Letters to Stakeholders



SIVEST
Environmental
Division

51 Wessel Road
PO Box 2921
Rivonia
2128 South Africa

Phone + 27 11 798 0600
Fax + 27 11 803 7272
Email info@sivest.co.za
www.sivest.co.za

SIVEST

Established in 1952

Your reference: 9529 MWRP

Our reference: B479 MWRP EIA

Date: 4 February 2011

Dear Interested and/or Affected Party

INVITATION TO PARTICIPATE: ENVIRONMENTAL IMPACT ASSESSMENT FOR THE DOUGLAS TAVISTOCK JOINT VENTURE'S (DTJV) PROPOSED MIDDELBURG WATER RECLAMATION PROJECT (MDEDET Ref No: 17/2/3/N28 and DEA Ref No.: 12/9/11/L492/)

Jones & Wagener Consulting Civil Engineers (J&W) has been appointed by the Douglas Tavistock Joint Venture (DTJV), a joint venture between of BHP Billiton Energy Coal South Africa (BECSA) (Pty) Limited and Tavistock Collieries (Pty) Limited to conduct an Environmental Impact Assessment (EIA) in terms of Government Notices GNR 543, 544 and 545 of the National Environmental Management Act, Act No. 107 of 1998, (NEMA) and GN 718 of 3 July 2009 of the National Environmental Management: Waste Act, Act 59 of 2008 (NEM:WA). The proposed Middelburg Water Reclamation Project (MWRP) is registered with the Mpumalanga Department of Economic Development, Environment and Tourism (MDEDET) under reference number MDEDET 17/2/3/N28 and the National Department of Environment (DEA) under reference number DEA 12/9/11/L492/6.

The DTJV is conducting a feasibility study for constructing and operating the MWRP to be located on Middelburg Mines North Section (now known as Middelburg Colliery) near Middelburg in the Mpumalanga Province. Part of the study entails obtaining all the required authorisations and licences. The proposed MWRP will include infrastructure, such as mine water pump facilities and pipelines, mine water balancing dam, water treatment plant, gypsum waste disposal facility and supporting infrastructure. The appended Background Information Document (BID) contains more information on the proposed MWRP – see attached.

The DTJV must obtain an environmental authorisation and required licences before commencing with the proposed project as required in terms of the provisions of the NEMA, NEM:WA and other legislation, such as the National Water Act. In order to obtain the authorisation and licences an Environmental Impact Assessment (EIA) needs to be undertaken. The EIA will include a scoping process, expected completion by the first quarter 2011, followed by the Impact Assessment, expected completion by the third quarter 2011. The public participation process will be conducted by SIVEST Environmental.

SIVEST Environmental would like to invite you, as an interested and/or affected party (I&AP), to become part of the EIA and public participation (PP) processes for the proposed project. The aim of this process is to ensure that the environmental impacts associated with the project are taken into consideration and mitigated, to ensure public input in decision making and to provide decision-makers with sufficient information to make an informed decision on the proposed activities associated with the project.

YOUR COMMENT IS IMPORTANT

You are invited to formally register as an interested and/or affected party (I&AP) and to participate in the EIA process by completing the registration and comment form enclosed with the BID. You are welcome to comment on the BID in any of the following ways:

- Submitting your completed registration and comment form to us on or before **Friday 11 March 2011**
- Writing a letter to be received by us on or before **Friday 11 March 2011**, or
- By e-mail, fax or phoning the public participation office.

Please note that we propose holding a Public Meeting in March 2011. This meeting will be advertised in various local newspapers and a personal invitation will be send to all registered I&APs on the project's PP database.

You are requested to use the registration and comment form to indicate your preferred method of notification and any direct business or other interest you may have in the environmental authorisation process. Several opportunities will be provided to your disposal to make contributions during the EIA process within set timeframes, and you will receive advance notification of these once you have registered.

We would like to thank you, in advance, for becoming part of the EIA and public participation processes and are looking forward to receiving your comments relating to the proposed project.

Yours sincerely



NICOLENE VENTER
Snr Public Participation Practitioner

Documents included: Background Information Document (BID)
Registration and Comment Form

Divisional Directors W A Pearce (Managing), J A Barnard, R G Kinvig, M A Nevette
A Division of SIVEST Directors * S D Leach (Chairman), M J Wright (Managing), * M S Hemingway, S G Joubert, H J McGlashan,
M J Meikle-Braes, W A Pearce, H G D Regnaud, G R Sims, K Soni, A F Tomkins (*British)
Offices in South Africa Durban, Johannesburg, Ladysmith, Pietermaritzburg, Richards Bay, Cape Town, Harare (Zimbabwe)

Part of the SIVEST Group

SIVEST SA (Pty) Ltd. Registration No. 2000/006717/07 /a SIVEST



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U verwysing:

Ons verwysing: 9529 MWRP

Datum: 11 Februarie 2011

Geagte Belangstellende en/of Geaffekteerde Party

UITNODIGING OM DEELNAME: OMGEWINGSIMPAKSTUDIE VIR DIE DOUGLAS TAVISTOCK GESAMENTLIKE ONDERNEMING (DTJV) SE VOORGESTELDE MIDDELBURG WATERHERWINNINGSPROJEK (MDEDET Verwysingsnommer 17/2/3/N28 en DEA Verwysingsnommer 12/9/11/L492/6)

Jones & Wagener Raadgewende Siviele Ingenieurs (J&W) is deur die Douglas Tavistock Gesamentlike Onderneming (DTJV), 'n gesamentlike onderneming tussen BHP Billiton Energy Coal South Africa (BECSA) (Edms.) Bpk. en Tavistock Collieries (Edms.) Bpk. aangestel om 'n Omgewingsimpakstudie (EIA) te onderneem ingevolge Staatskennisgewing R543, R544 en R545 van die Nasionale Wet op Omgewingsbestuur, Wet 107 van 1998 (NEMA) en Staatskennisgewing 718 van 3 Julie 2009 van die Nasionale Wet op Omgewingsbestuur: Afval, Wet 59 van 2008 (NEM:WA). Die voorgestelde Middelburg Waterherwinningprojek (MWRP) is by die Mpumalanga Departement Ekonomiese Ontwikkeling, Omgewing en Toerisme (MDEDET) geregistreer onder verwysingsnommer MDEDET 17/2/3/N28 en die Nasionale Departement van Omgewingsake (DEA) onder verwysingsnommer DEA 12/9/11/L492/6.

Die DTJV onderneem tans 'n definisiefase studie vir die oprigting en bedryf van die MWRP wat op Middelburg Myn Noord-seksie (nou bekend as Middelburg Steenkoolmyn) naby Middelburg in die Mpumalagaprovincie geleë sal wees. Deel van die studie behels die verkryging van al die nodige magtigings en lisensies. Die voorgestelde MWRP sluit infrastruktuur soos 'n mynwaterpompe en -pyplyne, 'n mynwaterbalanseerdam, waterbehandelingsaanleg, afvalwegdoeningfasiliteit en ondersteunende infrastruktuur in. Die aangehegte Agtergrondinligtingsdokument (BID) bevat meer inligting oor die voorgestelde MWRP – sien aangeheg.

Die DTJV moet 'n omgewingsmagtiging en die nodige lisensies bekom alvorens die voorgestelde projek 'n aanvang kan neem, soos verlang ingevolge die bepalings van die NEMA, NEM:WA en ander wetgewing, soos die Nasionale Waterwet. Ten einde die magtiging en lisensies te bekom moet 'n EIA onderneem word. Die EIA sal 'n bestekopnameproses insluit, wat na verwagting teen die eerste kwartaal van 2011 voltooi sal wees, gevolg deur die Impakevaluering, wat na verwagting teen die derde kwartaal van 2011 voltooi sal wees. SIVEST Environmental sal die openbare deelnameproses (PP) onderneem.

SIVEST Environmental wil u, as 'n belangstellende en/of geaffekteerde party (I&AP), nooi om deel te word van die EIA en openbare deelnameproses vir die voorgestelde projek. Die oogmerk van hierdie proses is om toe te sien dat die omgewingsimpakte wat met die projek geaardgaan in ag geneem en versag word, om openbare insette in die besluitnemingsproses te verseker en om aan besluitnemers genoegsame inligting te verskaf om 'n ingeligte besluit te neem oor die voorgestelde aktiwiteit wat met die projek geaardgaan.

U KOMMENTAAR IS BELANGRIK

U word uitgenooi om formeel as 'n I&AP te registreer en om aan die EIA-proses deel te neem deur die registrasie- en kommentaarvorm wat by die BID ingesluit is, in te vul. U is welkom om kommentaar op die BID te lewer deur:

- u voltooide registrasie- en kommentaarvorm voor of op **Vrydag, 11 Maart 2011** by ons in te dien;
- 'n brief te skryf wat ons voor of op **Vrydag, 11 Maart 2011** moet bereik; of
- per e-pos, faks of telefonies met die openbare deelnamekantoor in verbinding te tree.

Let asseblief daarop dat ons van voorneme is om in Maart 2011 'n Openbare Vergadering te hou. Hierdie vergadering sal in verskeie plaaslike koerante geadverteer word en 'n persoonlike uitnodiging sal aan alle geregistreerde I&APs op die projek se PP-databasis gestuur word.

U word versoek om van die registrasie- en kommentaarvorm gebruik te maak om die kennisgewingsmetode wat u verkies aan te dui, asook enige regstreekse sake- of ander belang wat u in die omgewingsmagtigingsproses mag hê. Tydens die EIA-proses sal u verskeie geleenthede hê om binne vasgestelde tydsraamwerke bydraes te lewer, en u sal vooraf hiervan in kennis gestel word wanneer u geregistreer het.

Ons wil u graag by voorbaat bedank vir u deelname aan die EIA- en openbare deelnameproses en ons sien uit daarna om u kommentaar betreffende die voorgestelde projek te ontvang.

Die uwe

NICOLENE VENTER
Senior Openbare Deelnamepraktisyn

Ingeslote dokumentasie: Agtergrondinligtingsdokument (BID)
Registrasie- en Kommentaarvorm

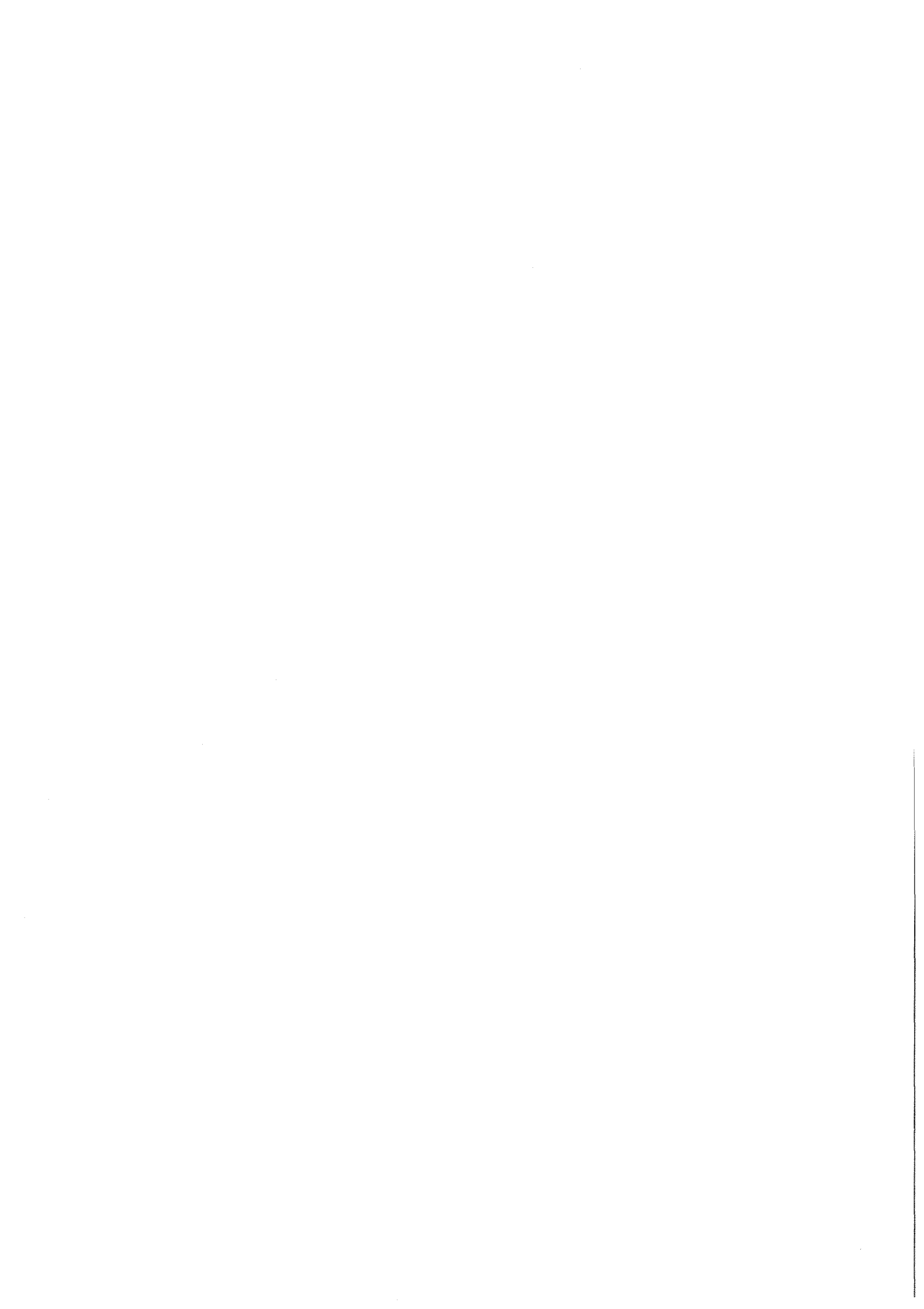
Divisional Directors W A Pearce (Managing), D B Blair, J A Bamard, R G Kinvig, M A Nevette
A Division of SIVEST Directors * S D Leach (Chairman), M J Wright (Managing), *R A Bell, *M S Hemingway, S G Joubert, H J McGlashan, M J Meikle-Braes, W A Pearce, H G D Regnaud, G R Sims, K Soni, A F Tomkins (*British)
Offices in South Africa Durban, Johannesburg, Ladysmith, Pietermaritzburg, Richards Bay, King Williams Town, Somerset West

Deel van die SIVEST Groep

SIVEST SA (Pty) Ltd Registration No. 2000/006717/07 t/a SIVEST



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Andrea Gibb

From: Nicolene Venter
Sent: Tuesday, April 12, 2011 6:33 AM
Cc: Kelly Tucker; Andrea Gibb
Subject: MWRP: Draft Scoping Review period nearing its end - Tuesday 19 April 2011

Importance: High

Dear Stakeholder

This serves as a reminder that the Draft Scoping Report for the Middelburg Water Reclamation Project has been made available for review and comment from **Tuesday 15 March 2011** to **Tuesday 19 April 2011** (end of business day) at the following public places in the Steve Tshwete Municipal Area:

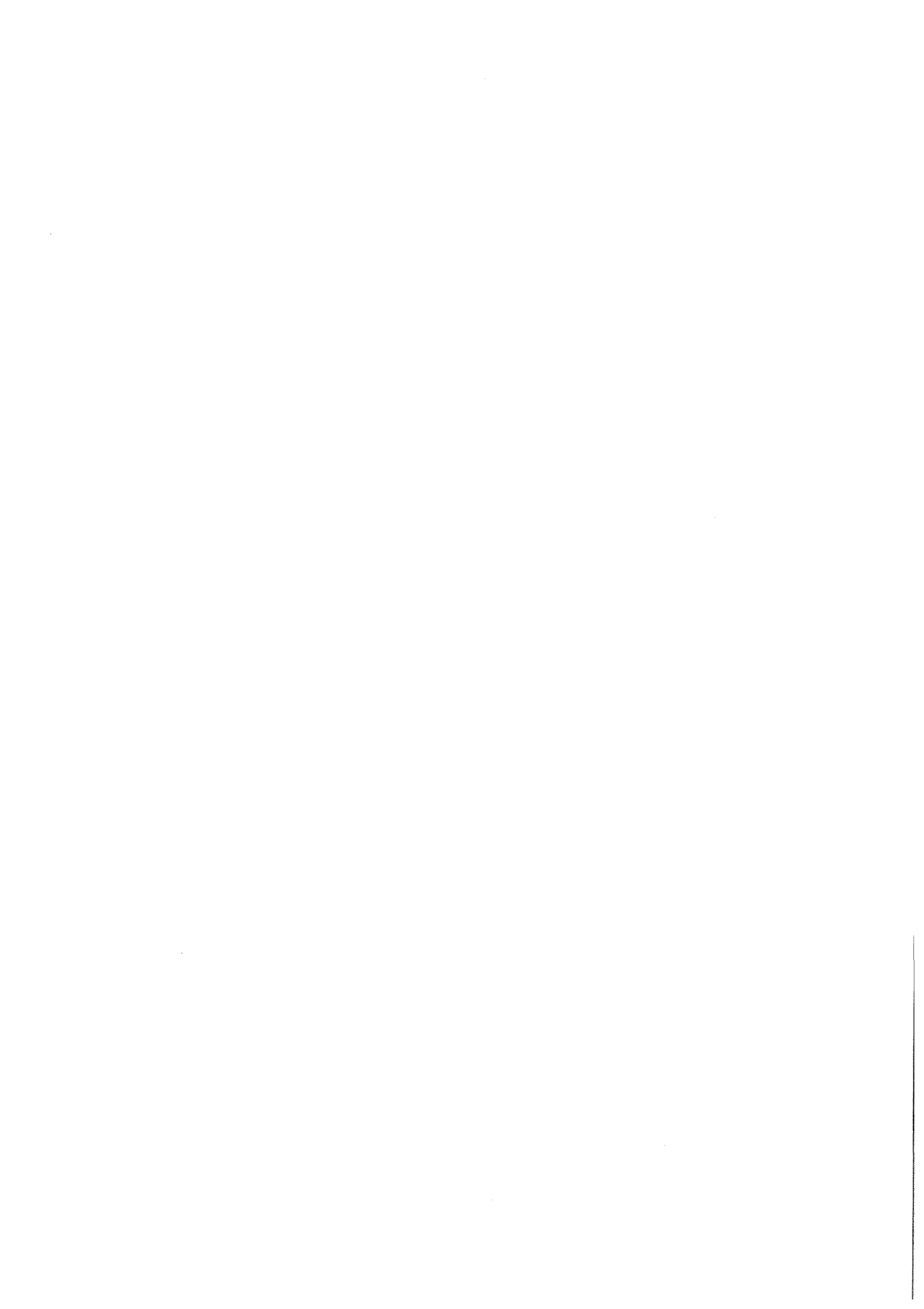
Venue	Street Address	Contact No
Middelburg Mines	Adjacent to Middelburg –Van Dyk's Drift Road, R575	Lindie Moore 013 689 3051
Naledi Village	Adjacent to Middelburg – Van Dyk's Drift Road, R575	Lindie Moore 013 689 3051
Gerard Sekoto Public Library	Wanderers Avenue, Middelburg	013 249 7297
Mhluzi Library	Ngwako Street, Mhluzi	013 242 1030
Eastdene Library	Verdoorn Street, Middelburg	013 249 7275

The review period is nearing its end and if you have not yet submitted your comments on the Draft Scoping Report, we urge you to please to so.

Kind regards

NICOLENE VENTER
Snr Public Participation Practitioner
SIVEST Environmental Division

direct +27 11 798 0635 **tel** +27 11 798 0600 **fax** +27 11 803 7272 **cell** +27 83 377 9112
e-mail nicolenev@sivest.co.za **website** www.sivest.co.za



SIVEST
Environmental
Division

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Rivonia
2128 South Africa

Phone + 27 11 798 0600
Fax + 27 11 803 7272
Email info@sivest.co.za
www.sivest.co.za

SIVEST

Established in 1952

Your reference: 9529 MWRP

Our reference: B479 MWRP EIA

Date: 4 February 2011

Dear Interested and/or Affected Party

INVITATION TO PARTICIPATE: ENVIRONMENTAL IMPACT ASSESSMENT FOR THE DOUGLAS TAVISTOCK JOINT VENTURE'S (DTJV) PROPOSED MIDDELBURG WATER RECLAMATION PROJECT (MDEDET Ref No: 17/2/3/N28 and DEA Ref No.: 12/9/11/L492/)

Jones & Wagener Consulting Civil Engineers (J&W) has been appointed by the Douglas Tavistock Joint Venture (DTJV), a joint venture between of BHP Billiton Energy Coal South Africa (BECSA) (Pty) Limited and Tavistock Collieries (Pty) Limited to conduct an Environmental Impact Assessment (EIA) in terms of Government Notices GNR 543, 544 and 545 of the National Environmental Management Act, Act No. 107 of 1998, (NEMA) and GN 718 of 3 July 2009 of the National Environmental Management: Waste Act, Act 59 of 2008 (NEM:WA). The proposed Middelburg Water Reclamation Project (MWRP) is registered with the Mpumalanga Department of Economic Development, Environment and Tourism (MDEDET) under reference number MDEDET 17/2/3/N28 and the National Department of Environment (DEA) under reference number DEA 12/9/11/L492/6.

The DTJV is conducting a feasibility study for constructing and operating the MWRP to be located on Middelburg Mines North Section (now known as Middelburg Colliery) near Middelburg in the Mpumalanga Province. Part of the study entails obtaining all the required authorisations and licences. The proposed MWRP will include infrastructure, such as mine water pump facilities and pipelines, mine water balancing dam, water treatment plant, gypsum waste disposal facility and supporting infrastructure. The appended Background Information Document (BID) contains more information on the proposed MWRP – see attached.

The DTJV must obtain an environmental authorisation and required licences before commencing with the proposed project as required in terms of the provisions of the NEMA, NEM:WA and other legislation, such as the National Water Act. In order to obtain the authorisation and licences an Environmental Impact Assessment (EIA) needs to be undertaken. The EIA will include a scoping process, expected completion by the first quarter 2011, followed by the Impact Assessment, expected completion by the third quarter 2011. The public participation process will be conducted by SiVEST Environmental.

SiVEST Environmental would like to invite you, as an interested and/or affected party (I&AP), to become part of the EIA and public participation (PP) processes for the proposed project. The aim of this process is to ensure that the environmental impacts associated with the project are taken into consideration and mitigated, to ensure public input in decision making and to provide decision-makers with sufficient information to make an informed decision on the proposed activities associated with the project.

YOUR COMMENT IS IMPORTANT

You are invited to formally register as an interested and/or affected party (I&AP) and to participate in the EIA process by completing the registration and comment form enclosed with the BID. You are welcome to comment on the BID in any of the following ways:

- Submitting your completed registration and comment form to us on or before **Friday 11 March 2011**
- Writing a letter to be received by us on or before **Friday 11 March 2011**, or
- By e-mail, fax or phoning the public participation office.

Please note that we propose holding a Public Meeting in March 2011. This meeting will be advertised in various local newspapers and a personal invitation will be send to all registered I&APs on the project's PP database.

You are requested to use the registration and comment form to indicate your preferred method of notification and any direct business or other interest you may have in the environmental authorisation process. Several opportunities will be provided to your disposal to make contributions during the EIA process within set timeframes, and you will receive advance notification of these once you have registered.

We would like to thank you, in advance, for becoming part of the EIA and public participation processes and are looking forward to receiving your comments relating to the proposed project.

Yours sincerely



NICOLENE VENTER
Snr Public Participation Practitioner

Documents included: Background Information Document (BID)
Registration and Comment Form

Divisional Directors W A Pearce (Managing), J A Barnard, R G Kinvig, M A Nevette
A Division of SiVEST Directors * S D Leach (Chairman), M J Wright (Managing), *M S Hemingway, S G Joubert, H J McGlashan,
M J Meikle-Braes, W A Pearce, H G D Regnaud, G R Sims, K Soni, A F Tomkins (*British)
Offices in South Africa Durban, Johannesburg, Ladysmith, Pietermaritzburg, Richards Bay, Cape Town, Harare (Zimbabwe)

Part of the SiVEST Group

SiVEST SA (Pty) Ltd Registration No. 2000/006717/07 I/a SiVEST



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U verwysing:

Ons verwysing: 9529 MWRP

Datum: 11 Februarie 2011

Geagte Belangstellende en/of Geaffekteerde Party

UITNODIGING OM DEELNAME: OMGEWINGSIMPAKSTUDIE VIR DIE DOUGLAS TAVISTOCK GESAMENTLIKE ONDERNEMING (DTJV) SE VOORGESTELDE MIDDELBURG WATERHERWINNINGSPROJEK (MDEDET Verwysingsnommer 17/2/3/N28 en DEA Verwysingsnommer 12/9/11/L492/6)

Jones & Wagener Raadgewende Siviele Ingenieurs (J&W) is deur die Douglas Tavistock Gesamentlike Onderneming (DTJV), 'n gesamentlike onderneming tussen BHP Billiton Energy Coal South Africa (BECSA) (Edms.) Bpk. en Tavistock Collieries (Edms.) Bpk. aangestel om 'n Omgewingsimpakstudie (EIA) te onderneem ingevolge Staatskennisgewing R543, R544 en R545 van die Nasionale Wet op Omgewingsbestuur, Wet 107 van 1998 (NEMA) en Staatskennisgewing 718 van 3 Julie 2009 van die Nasionale Wet op Omgewingsbestuur: Afval, Wet 59 van 2008 (NEM:WA). Die voorgestelde Middelburg Waterherwinningprojek (MWRP) is by die Mpumalanga Departement Ekonomiese Ontwikkeling, Omgewing en Toerisme (MDEDET) geregistreer onder verwysingsnommer MDEDET 17/2/3/N28 en die Nasionale Departement van Omgewingsake (DEA) onder verwysingsnommer DEA 12/9/11/L492/6.

Die DTJV onderneem tans 'n definisiefase studie vir die oprigting en bedryf van die MWRP wat op Middelburg Myn Noord-seksie (nou bekend as Middelburg Steenkoolmyn) naby Middelburg in die Mpumalagaprovincie geleë sal wees. Deel van die studie behels die verkryging van al die nodige magtigings en lisensies. Die voorgestelde MWRP sluit infrastruktuur soos 'n mynwaterpompe en -pylyne, 'n mynwaterbalanseerdam, waterbehandelingsaanleg, afvalwegdoeningfasiliteit en ondersteunende infrastruktuur in. Die aangehegte Agtergrondinligtingsdokument (BID) bevat meer inligting oor die voorgestelde MWRP – sien aangeheg.

Die DTJV moet 'n omgewingsmagtiging en die nodige lisensies bekom alvorens die voorgestelde projek 'n aanvang kan neem, soos verlang ingevolge die bepalings van die NEMA, NEM:WA en ander wetgewing, soos die Nasionale Waterwet. Ten einde die magtiging en lisensies te bekom moet 'n EIA onderneem word. Die EIA sal 'n bestekopnameproses insluit, wat na verwagting teen die eerste kwartaal van 2011 voltooi sal wees, gevolg deur die Impakevaluering, wat na verwagting teen die derde kwartaal van 2011 voltooi sal wees. SIVEST Environmental sal die openbare deelnameproses (PP) onderneem.

SIVEST Environmental wil u, as 'n belangstellende en/of geaffekteerde party (I&AP), nooi om deel te word van die EIA en openbare deelnameproses vir die voorgestelde projek. Die oogmerk van hierdie proses is om toe te sien dat die omgewingsimpakte wat met die projek geaardgaan in ag geneem en versag word, om openbare insette in die besluitnemingsproses te verseker en om aan besluitnemers genoegsame inligting te verskaf om 'n ingeligte besluit te neem oor die voorgestelde aktiwiteite wat met die projek geaardgaan.

U KOMMENTAAR IS BELANGRIK

U word uitgenooi om formeel as 'n I&AP te registreer en om aan die EIA-proses deel te neem deur die registrasie- en kommentaarvorm wat by die BID ingesluit is, in te vul. U is welkom om kommentaar op die BID te lewer deur:

- u voltooië registrasie- en kommentaarvorm voor of op **Vrydag, 11 Maart 2011** by ons in te dien;
- 'n brief te skryf wat ons voor of op **Vrydag, 11 Maart 2011** moet bereik; of
- per e-pos, faks of telefonies met die openbare deelnamekantoor in verbinding te tree.

Let asseblief daarop dat ons van voorneme is om in Maart 2011 'n Openbare Vergadering te hou. Hierdie vergadering sal in verskeie plaaslike koerante geadverteer word en 'n persoonlike uitnodiging sal aan alle geregistreeerde I&APs op die projek se PP-databasis gestuur word.

U word versoek om van die registrasie- en kommentaarvorm gebruik te maak om die kennisgewingsmetode wat u verkies aan te dui, asook enige regstreekse sake- of ander belang wat u in die omgewingsmagtigingsproses mag hê. Tydens die EIA-proses sal u verskeie geleenthede hê om binne vasgestelde tydsraamwerke bydraes te lewer, en u sal vooraf hiervan in kennis gestel word wanneer u geregistreer het.

Ons wil u graag by voorbaat bedank vir u deelname aan die EIA- en openbare deelnameproses en ons sien uit daarna om u kommentaar betreffende die voorgestelde projek te ontvang.

Die uwe

NICOLENE VENTER
Senior Openbare Deelnamepraktisyn

Ingeslote dokumentasie: Agtergrondinligtingsdokument (BID)
Registrasie- en Kommentaarvorm

Divisional Directors W A Pearce (Managing), D B Blair, J A Barnard, R G Kinvig, M A Nevette
A Division of SIVEST Directors * S D Leach (Chairman), M J Wright (Managing), *R A Bell, *M S Hemingway, S G Joubert, H J McGlashan,
M J Meikle-Braes, W A Pearce, H G D Regnaud, G R Sims, K Soni, A F Tomkins (*British)
Offices in South Africa Durban, Johannesburg, Ladysmith, Pietermaritzburg, Richards Bay, King Williams Town, Somerset West

Deel van die SIVEST Groep

SIVEST SA (Pty) Ltd Registration No. 2000/006717/07 /a SIVEST



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Andrea Gibb

From: Nicolene Venter
Sent: Tuesday, April 12, 2011 6:33 AM
Cc: Kelly Tucker; Andrea Gibb
Subject: MWRP: Draft Scoping Review period nearing its end - Tuesday 19 April 2011

Importance: High

Dear Stakeholder

This serves as a reminder that the Draft Scoping Report for the Middelburg Water Reclamation Project has been made available for review and comment from **Tuesday 15 March 2011** to **Tuesday 19 April 2011** (end of business day) at the following public places in the Steve Tshwete Municipal Area:

Venue	Street Address	Contact No
Middelburg Mines	Adjacent to Middelburg –Van Dyk's Drift Road, R575	Lindie Moore 013 689 3051
Naledi Village	Adjacent to Middelburg – Van Dyk's Drift Road, R575	Lindie Moore 013 689 3051
Gerard Sekoto Public Library	Wanderers Avenue, Middelburg	013 249 7297
Mhluzi Library	Ngwako Street, Mhluzi	013 242 1030
Eastdene Library	Verdoorn Street, Middelburg	013 249 7275

The review period is nearing its end and if you have not yet submitted your comments on the Draft Scoping Report, we urge you to please to so.

Kind regards

NICOLENE VENTER
Snr Public Participation Practitioner
SIVEST Environmental Division

direct +27 11 798 0635 tel +27 11 798 0600 fax +27 11 803 7272 cell +27 83 377 9112
e-mail nicolenev@sivest.co.za website www.sivest.co.za

Andrea Gibb

From: Joanne Turner
Sent: Tuesday, April 19, 2011 9:36 AM
Cc: Nicolene Venter; Andrea Gibb; 'Jacqui Hex'
Subject: MWRP: Draft Scoping Review period ending today - Tuesday 19 April 2011

Importance: High

Dear Stakeholder

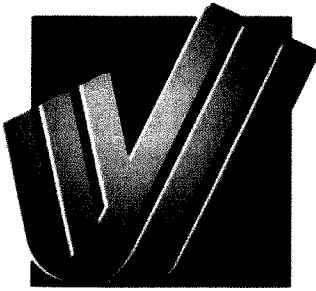
This e-mail serves to inform you that the review period for the Draft Scoping Report for the Middelburg Water Reclamation Project ends today, close of business day. We would like to thank those who have submitted comments on the Draft Scoping Report. If you have comments that you would like to make but have not yet submitted them, please do so before the close of business today.

Kind Regards

ANDREA GIBB
Environmental Consultant
SIVEST Environmental Division

direct +27 11 798 0638 **tel** +27 11 798 0600 **fax** +27 11 803 7272
email andreag@sivest.co.za **website** www.sivest.co.za

Consulting Engineers • Project Managers • Environmental Consultants • Town and Regional Planners
Durban • Johannesburg • Pietermaritzburg • Richards Bay • Ladysmith • Cape Town • Harare (Zimbabwe)



**ENVIRONMENTAL IMPACT ASSESSMENT
DOUGLAS TAVISTOCK JOINT VENTURE'S
(DTJV) PROPOSED MIDDELBURG WATER
RECLAMATION PROJECT (MWRP)**

(MDEDET Ref No: 17/2/3/N28 and DEA Ref No:
12/9/11/L492/6)

**PUBLIC MEETING
COMMENT FORM**

Completed during attendance at Public
Meeting

12 March 2011

Public Participation Office

SiVEST

Nicolene Venter/Andrea Gibb
SiVEST Environmental
PO Box 2921, RIVONIA, 2128
Tel (011) 798 0600
Fax (011) 803 7272
Email andreag@sivest.co.za

TITLE		FIRST NAME	
INITIALS		SURNAME	
ORGANISATION			
POSTAL ADDRESS			
		POSTAL CODE	
TEL NO		FAX NO	
CELL PHONE NO			
E-MAIL ADDRESS			

COMMENTS: You are welcome to use a separate sheet if required

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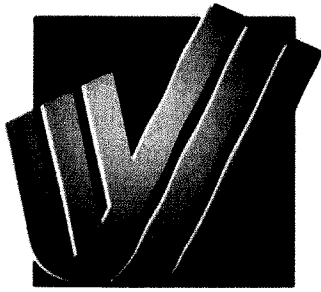
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THANK YOU FOR YOUR CONTRIBUTION

Signature

Date



OMGEWINGSIMPAKSTUDIE

**DOUGLAS TAVISTOCK GESAMENTLIKE
ONDERNEMING VIR DIE VOORGESTELDE
MIDDELBURG WATERHERWINNINGS-
PROJEK (MWRP)**
(MDEDET Verw No: 17/2/3/N28 en DEA Vers No:
12/9/11/L492/6)

**PUBLIEKE VERGADERING
KOMMENTAARVORM**

Voltooi tydens die bywoning van die
Publieke Vergadering

12 Maart 2011

Publieke Deelnamekantoor

SiVEST

Nicolene Venter / Andrea Gibb
SiVEST Environmental
Posbus 2921, RIVONIA, 2128
Tel (011) 798 0600
Faks (011) 803 7272
E-pos andreag@sivest.co.za

TITEL		NOEMNAAM	
VOORLETTERS		VAN	
ORGANISASIE			
POSBUS			
		POSKODE	
TEL NO		FAKS NO	
SELFOON NO.			
E-POS ADRES			

KOMMENTAAR: U is welkom om addisionele bladsye te gebruik, indien nodig

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Handtekening

DANKIE VIR U BYDRAE

Datum

Your reference:

Our reference: 9529 MWRP EIA

Date: 21 February 2011

Dear Interested and/or Affected Party

INVITATION TO PUBLIC MEETING AND NOTIFICATION OF AVAILABILITY OF THE DRAFT ENVIRONMENTAL SCOPING REPORT

PROPOSED MIDDELBURG WATER RECLAMATION PROJECT: ENVIRONMENTAL IMPACT ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PLAN (MDEDET Ref No: 17/2/3/N28 and DEA Ref No: 12/9/11/L492/6)

As part of the Environmental Impact Assessment (EIA) process and the public participation process for the above-mentioned proposed project, SiVEST Environmental would like to cordially invite you to attend the Public Meeting to be held as follows:

DATE: Saturday, 12 March 2011

TIME: 10:00 – 12:00

VENUE: BusMid Auditorium, Walter Sisulu Street (Church Street), Middelburg

This Public Meeting is part of the EIA process being undertaken by Jones & Wagener for the above mentioned project. The main objective of the proposed project is to treat excess impacted mine water to acceptable standards for discharge into the Upper Olifants River catchment.

As a stakeholder we would value your attendance at the Public Meeting. The purpose of the meeting is to:

- Provide background information regarding the proposed project.
- Provide information regarding the EIA process and studies.
- Provide the opportunity to raise any particular issue and/or concern that you as an Interested and/or Affected Party (I&AP) may have.
- Provide an opportunity to liaise with the project team members.
- Record the comments, issues and/or concerns raised during discussions.

To ensure that we provide sufficient space and seating, you are kindly requested to complete the attached registration form and return it to the Public Participation Office (contact details provided on the registration form) on or before Thursday, 3 March 2010.

Notification of the availability of the Draft Scoping Report (DSR) for public review

In accordance to the National Environmental Management Act (NEMA), the DSR will be available for public comment and review as from **Tuesday 15 March 2011** to **Tuesday 19 April 2011** (end of business day). Should you wish to receive an electronic copy of the DSR (CD) please forward your request in writing to us. Hard copies of the DSR can be reviewed at any of the following public places:

Venue	Street Address	Contact No
-------	----------------	------------

Divisional Directors W A Pearce (Managing), J A Barnard, R G Kinwig, M A Nevette
A Division of SiVEST Directors * S D Leach (Chairman), M J Wright (Managing), *M S Hemingway, S G Joubert, H J McGlashan,
M J Meikle-Braes, W A Pearce, H G D Regnaud, G R Sims, K Soni, A F Tomkins (*British)
Offices in South Africa Durban, Johannesburg, Ladysmith, Pietermaritzburg, Richards Bay, Cape Town, Harare (Zimbabwe)

Part of the SiVEST Group

SIVEST SA (Pty) Ltd Registration No. 2000/006717/07 Ua SIVEST



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Middelburg Mines	Adjacent to Middelburg – Van Dyk’s Drift Road, R575	013 689 3051 (Lindie Moore)
Naledi Village	Adjacent to Middelburg – Van Dyk’s Drift Road, R575	013 689 3051 (Lindie Moore)
Gerard Sekoto Public Library	Wanderers Avenue, Middelburg	013 249 7297
Mhluzi Library	Ngwako Street, Mhluzi	013 242 1030
Eastdene Library	Verdoorn Street, Middelburg	013 249 7275

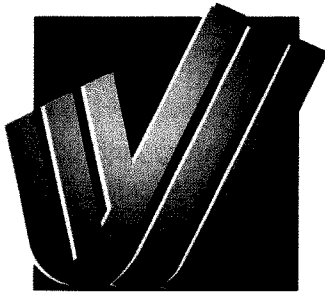
We are looking forward to your attendance at the Public Meeting and your meaningful contributions in the EIA process.

Kind regards



NICOLENE VENTER
Snr Public Participation Practitioner

Documents included: Public Meeting Registration Form
Draft Agenda



**ENVIRONMENTAL IMPACT
ASSESSMENT FOR MIDDELBURG
WATER RECLAMATION PROJECT
(MWRP) MIDDELBURG,
MPUMALANGA PROVINCE**

(MDEDET Ref No: 17/2/3/N28 and DEA Ref No:
12/9/11/L492/6)

**Public Meeting
Registration Form**

*Accompanying Public Meeting Invitation
Letter*

Public Participation Office

SIVEST

Nicolene Venter / Andrea Gibb
SiVEST Environmental
PO Box 2921, RIVONIA, 2128
Tel (011) 798 0600
Fax (011) 803 7272
Email andreag@sivest.co.za

Please complete and return to the Public Participation Office (as above) by THURSDAY 3 MARCH 2011

TITLE		FIRST NAME	
INITIALS		SURNAME	
ORGANISATION			
POSTAL ADDRESS			
		POSTAL CODE	
TEL NO		FAX NO	
CELL PHONE NO			
E-MAIL ADDRESS			

Please indicate whether you will be attending the Public Meeting by **circling** your response:

DATE & TIME	REGISTRATION	
Saturday, 12 March 2011 from 10:00 to 12:00	YES	NO

If you cannot attend the Public Meeting, would you like to receive a copy of the draft minutes, if so please indicate by **circling** your response):

	RESPONSE	
Request for copy of Public Meeting minutes	YES	NO

How would you prefer to receive your correspondence? Please tick the appropriate box?

E-mail	<input type="checkbox"/>
Fax	<input type="checkbox"/>
Mail (Postal)	<input type="checkbox"/>

Please invite the following colleagues/friends to the Public Meeting, if not yet invited.
(Please provide us with the person's name and contact details e.g. e-mail address):

.....
.....

THANK YOU FOR REGISTERING

Signature

Date



**OMGEWINGSIMPAKSTUDIE VIR DIE
DOUGLAS TAVISTOCK GESAMENTLIKE
ONDERNEMING (DTJV) SE VOORGESTELDE
MIDDELBURG WATERHERWINNINGSPROJEK
(MWRP), MIDDELBURG, MPUMALANGA
PROVINSIE**

(MDEDET Verw No: 17/2/3/N28 en DEA Verw
No: 12/9/11/L492/6)

**Publieke Vergadering
Registrasievorm**

*Bykomend tot die Publieke Vergadering
Uitnodigingsbrief*

Openbare Deelnamekantoor

SIVEST

Nicolene Venter / Andrea Gibb
SIVEST Environmental
Posbus 2921, RIVONIA, 2128
Tel (011) 798 0600
Faks (011) 803 7272
E-pos andreag@sivest.co.za

Voltooi asb en stuur terug aan die Openbare Deelnamekantoor (soos hierbo) voor of op DONDERDAG 3 MAART 2011

TITEL		NOEMNAAM	
VOORLETTERS		VAN	
ORGANISASIE			
POSADRES			
		POSKODE	
TEL NO		FAKS NO	
SELFOONNO.			
E-POS ADRES			

Dui asb aan of u die Publieke Vergadering gaan bywoon deur u keuse te **omkring**.

DATUM & TYD	REGISTRASIE	
Saterdag, 12 Maart 2011 van 10:00 tot 12:00	JA	NEE

Indien u nie die Publieke Vergadering kan bywoon nie, verlang u 'n afskrif van die notule? Indien wel, **omring** asb u keuse.

	KEUSE	
Verlang afskrif van die Publieke Veradering notule	JA	NEE

Hoe verkies u om u kommunikasie te ontvang? Dui asb u keuse aan met ✓

E-pos

Faks

Pos

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

Nooi asb die volgende kollegas/vriende na die Publieke Vergadering, indien nog nie uitgenooi nie.

(Voorsien ons asb van die persoon se naam en kontakligting bv e-pos adres):

.....

DANKIE VIR U REGISTRASIE

Handtekening

Datum

Your reference:

Our reference: 9529 MWRP

Date: 25 May 2011

Dear Stakeholder

MIDDELBURG WATER RECLAMATION PROJECT: ENVIRONMENTAL IMPACT ASSESSMENT (EIA), WASTE LICENSE, INTEGRATED WATER USE LICENSE AND ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPR) AMENDMENT (MDEDET Ref No 17/2/3/N28, DEA Ref No 12/9/11/L492/6 and MINING LICENSE: 9/99 issued under DMR Ref No OT/5/3/2/49 Conversion under DMR Ref No MP30/5/1/2/2/379MR)

- **FINAL SCOPING REPORT SUBMITTED TO MDEDET, DEA AND DMR**
- **CHANGE IN PROJECT INFORMATION: PLANT CAPACITY**

We wish to express our appreciation to the stakeholders who submitted comments on the Draft Scoping Report for the abovementioned project and its accompanying documents during the public review period (Tuesday, 15 March 2011 to Tuesday, 19 April 2011).

After the public review period, the Scoping Report was updated, taking into consideration the issues, concerns and comments raised by stakeholders, and has been submitted to the Mpumalanga Department of Economic Development, Environment and Tourism (MDEDET), the Department of Environment Affairs (DEA) and the Department of Mineral Resources (DMR) for consideration.

According to the Environmental Impact Assessment (EIA) Regulations promulgated on 2 August 2010 in terms of the National Environmental Management Act (NEMA, 107 of 1998) Government Notice Regulation 543 Section 56 (2), before an Environmental Assessment Practitioner (EAP) managing an application for environmental authorisations can submit a final report compiled in terms of these Regulations to the competent authority, the EAP must give registered Interested and/or Affected Parties (I&APs) access to, and an opportunity to comment on the report. These comments must be received in writing. Furthermore, in terms of Section 56 (6) registered I&APs must submit comments on final reports contemplated in sub regulation 56 (3), i.e. a Final Scoping Report (FSR), to the competent authority and provide a copy of such comments to the applicant or EAP.

In this regard we would like to take this opportunity to inform all I&APs of the availability of the FSR at the following public places from Wednesday 25 May to Tuesday 14 June 2011. Alternatively please contact SiVEST to obtain a soft copy (CD) of the report.

Venue	Street Address	Contact No
Middelburg Mines	Adjacent to Middelburg – Van Dyk's Drift Road, R575	Lindie Moore 013 689 3051
Naledi Village	Adjacent to Middelburg – Van Dyk's Drift Road, R575	Lindie Moore 013 689 3051
Gerard Sekoto Public Library	Wanderers Avenue, Middelburg	013 249 7297
Mhluzi Library	Ngwako Street, Mhluzi	013 242 1030
Eastdene Library	Verdoorn Street, Middelburg	013 249 7275

Should you have any comments on the FSR, please submit these written comments to:

SIVEST Environmental: Andrea Gibb
Tel: (011) 798 0600
Fax: (011) 803 772
Email: andreag@sivest.co.za

AND

MDEDET: Hlamarisa Mavodze
Tel: 013 653 5300
Fax: 013 690 3704
Email: himavodze@wit.mpu.gov.za

AND

DEA: Mr M Phaladi / L Mahlangu
Tel: (012) 310 3870 / 3536
Fax: (012) 310 3753
Email: mphaladi@environment.gov.za / lmahlangu@environment.gov.za

Plant Capacity Change

It was initially proposed in the Background Information Document (BID) that the first phase of the facility will treat 15 ML/day (15 000 cubic metres per day) of mine water. It is important to note that the plant capacity for the first phase has been increased and it is now proposed that the facility will treat between 15 and 20 ML/day (20 000 cubic metres per day) of mine water.

Way Forward

The next phase of the EIA process is the Impact Assessment Phase, during which all potential impacts identified during the Scoping Phase of the EIA process, positive and negative, associated with the proposed project, will be quantified and addressed. During the Impact Assessment phase, all registered I&APs will be informed when the draft consolidated Environmental Impact Report (EIR) and Environmental Management Programme (EMPR) Amendment is available for comment. During this time a public meeting will be held to present the findings of the consolidated report. The date for the public meeting will be confirmed after the authorities have made a decision in terms of the FSR.

Should you require any additional information, please contact either myself or Andrea Gibb at the aforementioned contact details

Yours sincerely



Nicolene Venter
Snr Public Participation Practitioner
SIVEST Environmental Division

Chrisan Nienaber

From: Nicolene Venter [NicoleneV@sivest.co.za]
Sent: 26 May 2011 01:17 AM
To: Jacqui Hex
Cc: Andrea Gibb
Subject: EIA: MWRP - Notification of Final Scoping Report Review Period
Attachments: MWR FSR Feedback Letter - 25 May 2011.pdf

Importance: High

Dear Interested and/or Affected Party

We would like to take this opportunity to inform you that the Final Scoping Report (FSR) for the Middelburg Water Reclamation Project has been completed.

Please find attached your notification of the availability of the Final Scoping Report for review..

We would like to thank you for participating in the Environmental Impact Assessment (Scoping) process and for being part of the public participation process thus far.

Kind Regards

NICOLENE VENTER
Snr Public Participation Practitioner
SIVEST Environmental Division

tel (direct) +27 11 798 0635 tel (general) +27 11798 0600 fax +27 11 803 7272 cell 083 377 9112
email nicolenev@sivest.co.za website www.sivest.co.za

Consulting Engineers • Project Managers • Environmental Consultants • Town and Regional Planners
Durban • Johannesburg • Pietermaritzburg • Richards Bay • Ladysmith • Cape Town • Harare (Zimbabwe)

**ENVIRONMENTAL IMPACT ASSESSMENT AND
ENVIRONMENTAL MANAGEMENT PROGRAMME
DOUGLAS TAVISTOCK JOINT VENTURE'S PROPOSED
MIDDLEBURG WATER RECLAMATION PROJECT**



(MDEDET Ref No: 17/2/3/N28 and
DEA Ref No: 2/9/11/L492/6)



OPPORTUNITY TO COMMENT

**Final Scoping Report review and comment period
WEDNESDAY 25 MAY 2011 to TUESDAY 14 JUNE 2011**

**Please submit any written comments you may have regarding
this Final Scoping Report to the Public Participation Office**

**For more information and to register as an Interested
and/or Affected Party for the proposed project,
please contact:**

**Nicolene Venter / Andrea Gibb
Public Participation Office
SIVEST Environmental**

P O Box 2921, Rivonia, 2128

Email: nicolenev@sivest.co.za / andreag@sivest.co.za

Tel: (011) 798 0600

Fax: (011) 803 7272

Due date for comments: TUESDAY 14 JUNE 2011

Andrea Gibb

From: Joanne Turner
Sent: Tuesday, April 19, 2011 9:36 AM
Cc: Nicolene Venter; Andrea Gibb; 'Jacqui Hex'
Subject: MWRP: Draft Scoping Review period ending today - Tuesday 19 April 2011

Importance: High

Dear Stakeholder

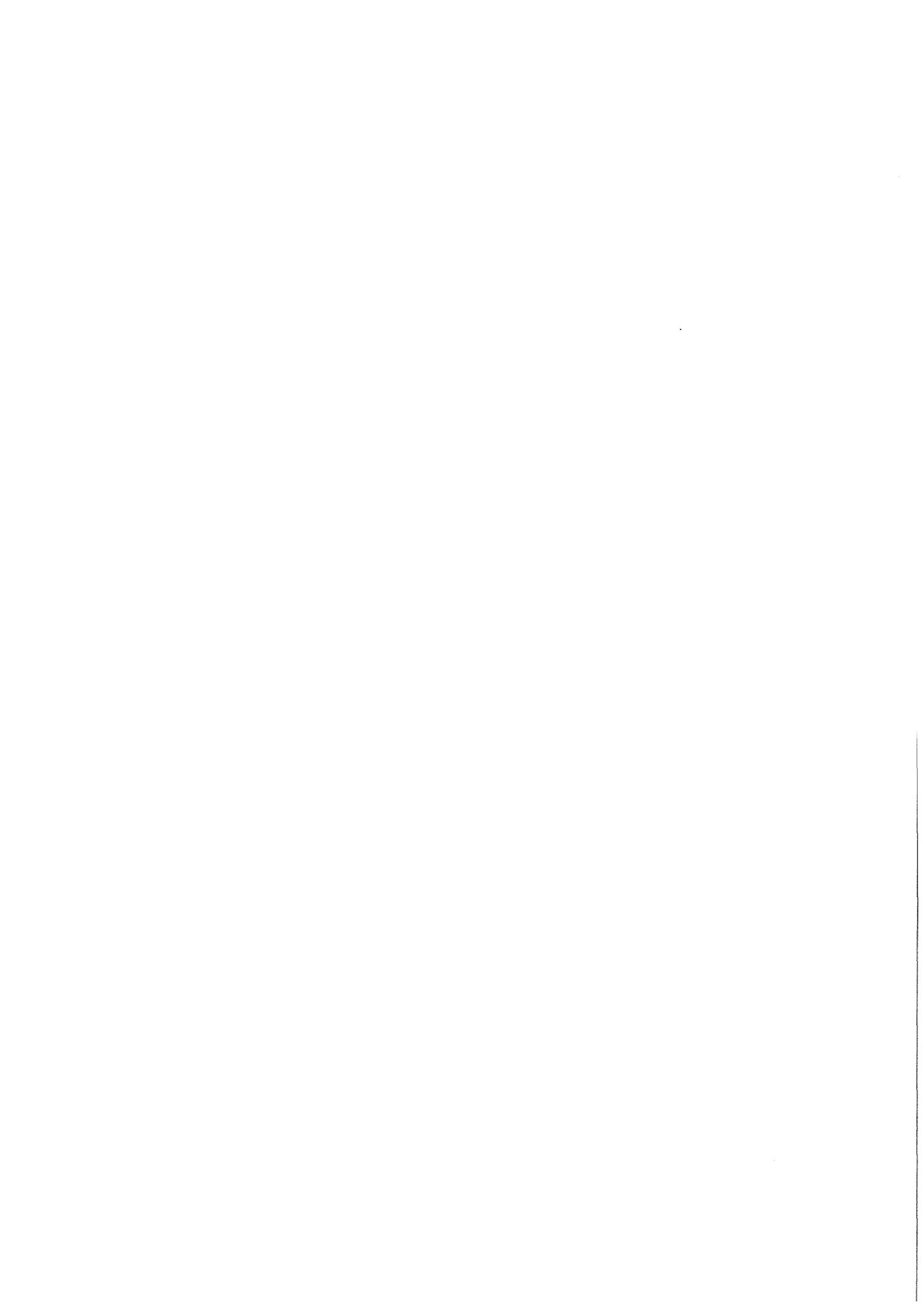
This e-mail serves to inform you that the review period for the Draft Scoping Report for the Middelburg Water Reclamation Project ends today, close of business day. We would like to thank those who have submitted comments on the Draft Scoping Report. If you have comments that you would like to make but have not yet submitted them, please do so before the close of business today.

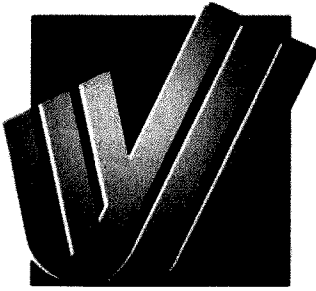
Kind Regards

ANDREA GIBB
Environmental Consultant
SIVEST Environmental Division

direct +27 11 798 0638 tel +27 11 798 0600 fax +27 11 803 7272
email andrea@sivest.co.za website www.sivest.co.za

Consulting Engineers • Project Managers • Environmental Consultants • Town and Regional Planners
Durban • Johannesburg • Pietermaritzburg • Richards Bay • Ladysmith • Cape Town • Harare (Zimbabwe)





**ENVIRONMENTAL IMPACT ASSESSMENT
DOUGLAS TAVISTOCK JOINT VENTURE'S
(DTJV) PROPOSED MIDDELBURG WATER
RECLAMATION PROJECT (MWRP)**

(MDEDET Ref No: 17/2/3/N28 and DEA Ref No:
12/9/11/L492/6)

**PUBLIC MEETING
COMMENT FORM**

Completed during attendance at Public
Meeting

12 March 2011

Public Participation Office

SIVEST

Nicolene Venter/Andrea Gibb
SiVEST Environmental
PO Box 2921, RIVONIA, 2128
Tel (011) 798 0600
Fax (011) 803 7272
Email andreag@sivest.co.za

TITLE		FIRST NAME	
INITIALS		SURNAME	
ORGANISATION			
POSTAL ADDRESS			
		POSTAL CODE	
TEL NO		FAX NO	
CELL PHONE NO			
E-MAIL ADDRESS			

COMMENTS: You are welcome to use a separate sheet if required

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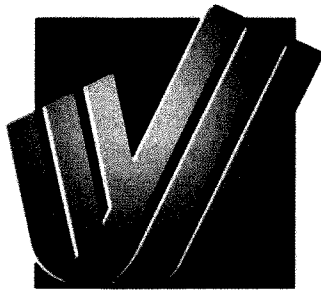
.....

.....

THANK YOU FOR YOUR CONTRIBUTION

Signature

Date



OMGEWINGSIMPAKSTUDIE

**DOUGLAS TAVISTOCK GESAMENTLIKE
ONDERNEMING VIR DIE VOORGESTELDE
MIDDELBURG WATERHERWINNINGS-
PROJEK (MWRP)**
(MDEDET Verw No: 17/2/3/N28 en DEA Vers No:
12/9/11/L492/6)

**PUBLIEKE VERGADERING
KOMMENTAARVORM**

Voltooi tydens die bywoning van die
Publieke Vergadering

12 Maart 2011

Publieke Deelnamekantoor

SIVEST

Nicolene Venter / Andrea Gibb
SiVEST Environmental
Posbus 2921, RIVONIA, 2128
Tel (011) 798 0600
Faks (011) 803 7272
E-pos andreag@sivest.co.za

TITEL		NOEMNAAM	
VOORLETTERS		VAN	
ORGANISASIE			
POSBUS		POSKODE	
TEL NO		FAKS NO	
SELFOON NO.			
E-POS ADRES			

KOMMENTAAR: U is welkom om addisionele bladsye te gebruik, indien nodig

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Handtekening

DANKIE VIR U BYDRAE

Datum

Your reference:

Our reference: 9529 MWRP EIA

Date: 21 February 2011

Dear Interested and/or Affected Party

INVITATION TO PUBLIC MEETING AND NOTIFICATION OF AVAILABILITY OF THE DRAFT ENVIRONMENTAL SCOPING REPORT

PROPOSED MIDDELBURG WATER RECLAMATION PROJECT: ENVIRONMENTAL IMPACT ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PLAN (MDEDET Ref No: 17/2/3/N28 and DEA Ref No: 12/9/11/L492/6)

As part of the Environmental Impact Assessment (EIA) process and the public participation process for the above-mentioned proposed project, SiVEST Environmental would like to cordially invite you to attend the Public Meeting to be held as follows:

DATE: Saturday, 12 March 2011

TIME: 10:00 – 12:00

VENUE: BusMid Auditorium, Walter Sisulu Street (Church Street), Middelburg

This Public Meeting is part of the EIA process being undertaken by Jones & Wagener for the above mentioned project. The main objective of the proposed project is to treat excess impacted mine water to acceptable standards for discharge into the Upper Olifants River catchment.

As a stakeholder we would value your attendance at the Public Meeting. The purpose of the meeting is to:

- Provide background information regarding the proposed project.
- Provide information regarding the EIA process and studies.
- Provide the opportunity to raise any particular issue and/or concern that you as an Interested and/or Affected Party (I&AP) may have.
- Provide an opportunity to liaise with the project team members.
- Record the comments, issues and/or concerns raised during discussions.

To ensure that we provide sufficient space and seating, you are kindly requested to complete the attached registration form and return it to the Public Participation Office (contact details provided on the registration form) on or before Thursday, 3 March 2010.

Notification of the availability of the Draft Scoping Report (DSR) for public review

In accordance to the National Environmental Management Act (NEMA), the DSR will be available for public comment and review as from **Tuesday 15 March 2011** to **Tuesday 19 April 2011** (end of business day). Should you wish to receive an electronic copy of the DSR (CD) please forward your request in writing to us. Hard copies of the DSR can be reviewed at any of the following public places:

Venue	Street Address	Contact No
-------	----------------	------------

Divisional Directors W A Pearce (Managing), J A Barnard, R G Kinvig, M A Nevette
A Division of SiVEST Directors * S D Leach (Chairman), M J Wright (Managing), *M S Hemingway, S G Joubert, H J McGlashan,
M J Meikle-Braes, W A Pearce, H G D Regnaud, G R Sims, K Soni, A F Tomkins (*British)
Offices in South Africa Durban, Johannesburg, Ladysmith, Pietermaritzburg, Richards Bay, Cape Town, Harare (Zimbabwe)

Part of the SiVEST Group

SIVEST SA (Pty) Ltd Registration No. 2000/006717/07 Ua SiVEST



SETA
THREE STAR
GRADING SYSTEM
Quality Management
Accredited

Middelburg Mines	Adjacent to Middelburg – Van Dyk's Drift Road, R575	013 689 3051 (Lindie Moore)
Naledi Village	Adjacent to Middelburg – Van Dyk's Drift Road, R575	013 689 3051 (Lindie Moore)
Gerard Sekoto Public Library	Wanderers Avenue, Middelburg	013 249 7297
Mhluzi Library	Ngwako Street, Mhluzi	013 242 1030
Eastdene Library	Verdoorn Street, Middelburg	013 249 7275

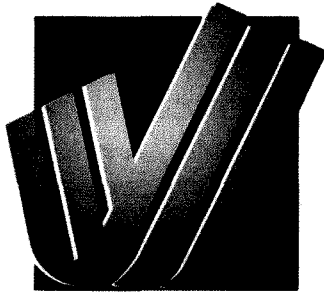
We are looking forward to your attendance at the Public Meeting and your meaningful contributions in the EIA process.

Kind regards



NICOLENE VENTER
Snr Public Participation Practitioner

Documents included: Public Meeting Registration Form
Draft Agenda



**ENVIRONMENTAL IMPACT
ASSESSMENT FOR MIDDELBURG
WATER RECLAMATION PROJECT
(MWRP) MIDDELBURG,
MPUMALANGA PROVINCE**

(MDEDET Ref No: 17/2/3/N28 and DEA Ref No:
12/9/11/L492/6)

**Public Meeting
Registration Form**

*Accompanying Public Meeting Invitation
Letter*

Public Participation Office

SIVEST

Nicolene Venter / Andrea Gibb
SiVEST Environmental
PO Box 2921, RIVONIA, 2128
Tel (011) 798 0600
Fax (011) 803 7272
Email andreag@sivest.co.za

Please complete and return to the Public Participation Office (as above) by THURSDAY 3 MARCH 2011

TITLE		FIRST NAME	
INITIALS		SURNAME	
ORGANISATION			
POSTAL ADDRESS			
		POSTAL CODE	
TEL NO		FAX NO	
CELL PHONE NO			
E-MAIL ADDRESS			

Please indicate whether you will be attending the Public Meeting by **circling** your response:

DATE & TIME	REGISTRATION	
Saturday, 12 March 2011 from 10:00 to 12:00	YES	NO

If you cannot attend the Public Meeting, would you like to receive a copy of the draft minutes, if so please indicate by **circling** your response):

	RESPONSE	
Request for copy of Public Meeting minutes	YES	NO

How would you prefer to receive your correspondence? Please tick the appropriate box?

E-mail	<input type="checkbox"/>
Fax	<input type="checkbox"/>
Mail (Postal)	<input type="checkbox"/>

Please invite the following colleagues/friends to the Public Meeting, if not yet invited.

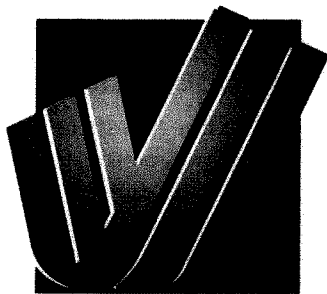
(Please provide us with the person's name and contact details e.g. e-mail address):

.....

THANK YOU FOR REGISTERING

Signature

Date



**OMGEWINGSIMPAKSTUDIE VIR DIE
DOUGLAS TAVISTOCK GESAMENTLIKE
ONDERNEMING (DTJV) SE VOORGESTELDE
MIDDELBURG WATERHERWINNINGSPROJEK
(MWRP), MIDDELBURG, MPUMALANGA
PROVINSIE**

(MDEDET Verw No: 17/2/3/N28 en DEA Verw
No: 12/9/11/L492/6)

**Publieke Vergadering
Registrasievorm**

*Bykomend tot die Publieke Vergadering
Uitnodigingsbrief*

Openbare Deelnamekantoor

SIVEST

Nicolene Venter / Andrea Gibb
SiVEST Environmental
Posbus 2921, RIVONIA, 2128
Tel (011) 798 0600
Faks (011) 803 7272
E-pos andreag@sivest.co.za

Voltooi asb en stuur terug aan die Openbare Deelnamekantoor (soos hierbo) voor of op DONDERDAG 3 MAART 2011

TITEL		NOEMNAAM	
VOORLETTERS		VAN	
ORGANISASIE			
POSADRES			
		POSKODE	
TEL NO		FAKS NO	
SELFOONNO.			
E-POS ADRES			

Dui asb aan of u die Publieke Vergadering gaan bywoon deur u keuse te **omkring**.

DATUM & TYD	REGISTRASIE	
Saterdag, 12 Maart 2011 van 10:00 tot 12:00	J A	N E E

Indien u nie die Publieke Vergadering kan bywoon nie, verlang u 'n afskrif van die notule? Indien wel, **omring** asb u keuse.

	KEUSE	
Verlang afskrif van die Publieke Veradering notule	J A	N E E

Hoe verkies u om u kommunikasie te ontvang? Dui asb u keuse aan met ✓

E-pos

Faks

Pos

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

Nooi asb die volgende kollegas/vriende na die Publieke Vergadering, indien nog nie uitgenooi nie.

(Voorsien ons asb van die persoon se naam en kontakligting bv e-pos adres):

.....

DANKIE VIR U REGISTRASIE

Handtekening

Datum

Your reference:

Our reference: 9529 MWRP

Date: 25 May 2011

Dear Stakeholder

MIDDELBURG WATER RECLAMATION PROJECT: ENVIRONMENTAL IMPACT ASSESSMENT (EIA), WASTE LICENSE, INTEGRATED WATER USE LICENSE AND ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPR) AMENDMENT (MDEDET Ref No 17/2/3/N28, DEA Ref No 12/9/11/L492/6 and MINING LICENSE: 9/99 issued under DMR Ref No OT/5/3/2/49 Conversion under DMR Ref No MP30/5/1/2/2/379MR)

- **FINAL SCOPING REPORT SUBMITTED TO MDEDET, DEA AND DMR**
- **CHANGE IN PROJECT INFORMATION: PLANT CAPACITY**

We wish to express our appreciation to the stakeholders who submitted comments on the Draft Scoping Report for the abovementioned project and its accompanying documents during the public review period (Tuesday, 15 March 2011 to Tuesday, 19 April 2011).

After the public review period, the Scoping Report was updated, taking into consideration the issues, concerns and comments raised by stakeholders, and has been submitted to the Mpumalanga Department of Economic Development, Environment and Tourism (MDEDET), the Department of Environment Affairs (DEA) and the Department of Mineral Resources (DMR) for consideration.

According to the Environmental Impact Assessment (EIA) Regulations promulgated on 2 August 2010 in terms of the National Environmental Management Act (NEMA, 107 of 1998) Government Notice Regulation 543 Section 56 (2), before an Environmental Assessment Practitioner (EAP) managing an application for environmental authorisations can submit a final report compiled in terms of these Regulations to the competent authority, the EAP must give registered Interested and/or Affected Parties (I&APs) access to, and an opportunity to comment on the report. These comments must be received in writing. Furthermore, in terms of Section 56 (6) registered I&APs must submit comments on final reports contemplated in sub regulation 56 (3), i.e. a Final Scoping Report (FSR), to the competent authority and provide a copy of such comments to the applicant or EAP.

In this regard we would like to take this opportunity to inform all I&APs of the availability of the FSR at the following public places from Wednesday 25 May to Tuesday 14 June 2011. Alternatively please contact SIVEST to obtain a soft copy (CD) of the report.

Venue	Street Address	Contact No
Middelburg Mines	Adjacent to Middelburg – Van Dyk's Drift Road, R575	Lindie Moore 013 689 3051
Naledi Village	Adjacent to Middelburg – Van Dyk's Drift Road, R575	Lindie Moore 013 689 3051
Gerard Sekoto Public Library	Wanderers Avenue, Middelburg	013 249 7297
Mhluzi Library	Ngwako Street, Mhluzi	013 242 1030
Eastdene Library	Verdoorn Street, Middelburg	013 249 7275

Should you have any comments on the FSR, please submit these written comments to:

SIVEST Environmental: Andrea Gibb
Tel: (011) 798 0600
Fax: (011) 803 772
Email: andreag@sivest.co.za

AND

MDEDET: Hlamarisa Mavodze
Tel: 013 653 5300
Fax: 013 690 3704
Email: himavodze@wit.mpu.gov.za

AND

DEA: Mr M Phaladi / L Mahlangu
Tel: (012) 310 3870 / 3536
Fax: (012) 310 3753
Email: mphaladi@environment.gov.za / lmahlangu@environment.gov.za

Plant Capacity Change

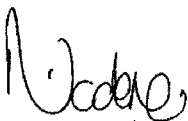
It was initially proposed in the Background Information Document (BID) that the first phase of the facility will treat 15 ML/day (15 000 cubic metres per day) of mine water. It is important to note that the plant capacity for the first phase has been increased and it is now proposed that the facility will treat between 15 and 20 ML/day (20 000 cubic metres per day) of mine water.

Way Forward

The next phase of the EIA process is the Impact Assessment Phase, during which all potential impacts identified during the Scoping Phase of the EIA process, positive and negative, associated with the proposed project, will be quantified and addressed. During the Impact Assessment phase, all registered I&APs will be informed when the draft consolidated Environmental Impact Report (EIR) and Environmental Management Programme (EMPR) Amendment is available for comment. During this time a public meeting will be held to present the findings of the consolidated report. The date for the public meeting will be confirmed after the authorities have made a decision in terms of the FSR.

Should you require any additional information, please contact either myself or Andrea Gibb at the aforementioned contact details

Yours sincerely



Nicolene Venter
Snr Public Participation Practitioner
SIVEST Environmental Division

Chrisan Nienaber

From: Nicolene Venter [NicoleneV@sivest.co.za]
Sent: 26 May 2011 01:17 AM
To: Jacqui Hex
Cc: Andrea Gibb
Subject: EIA: MWRP - Notification of Final Scoping Report Review Period
Attachments: MWR FSR Feedback Letter - 25 May 2011.pdf

Importance: High

Dear Interested and/or Affected Party

We would like to take this opportunity to inform you that the Final Scoping Report (FSR) for the Middelburg Water Reclamation Project has been completed.

Please find attached your notification of the availability of the Final Scoping Report for review..

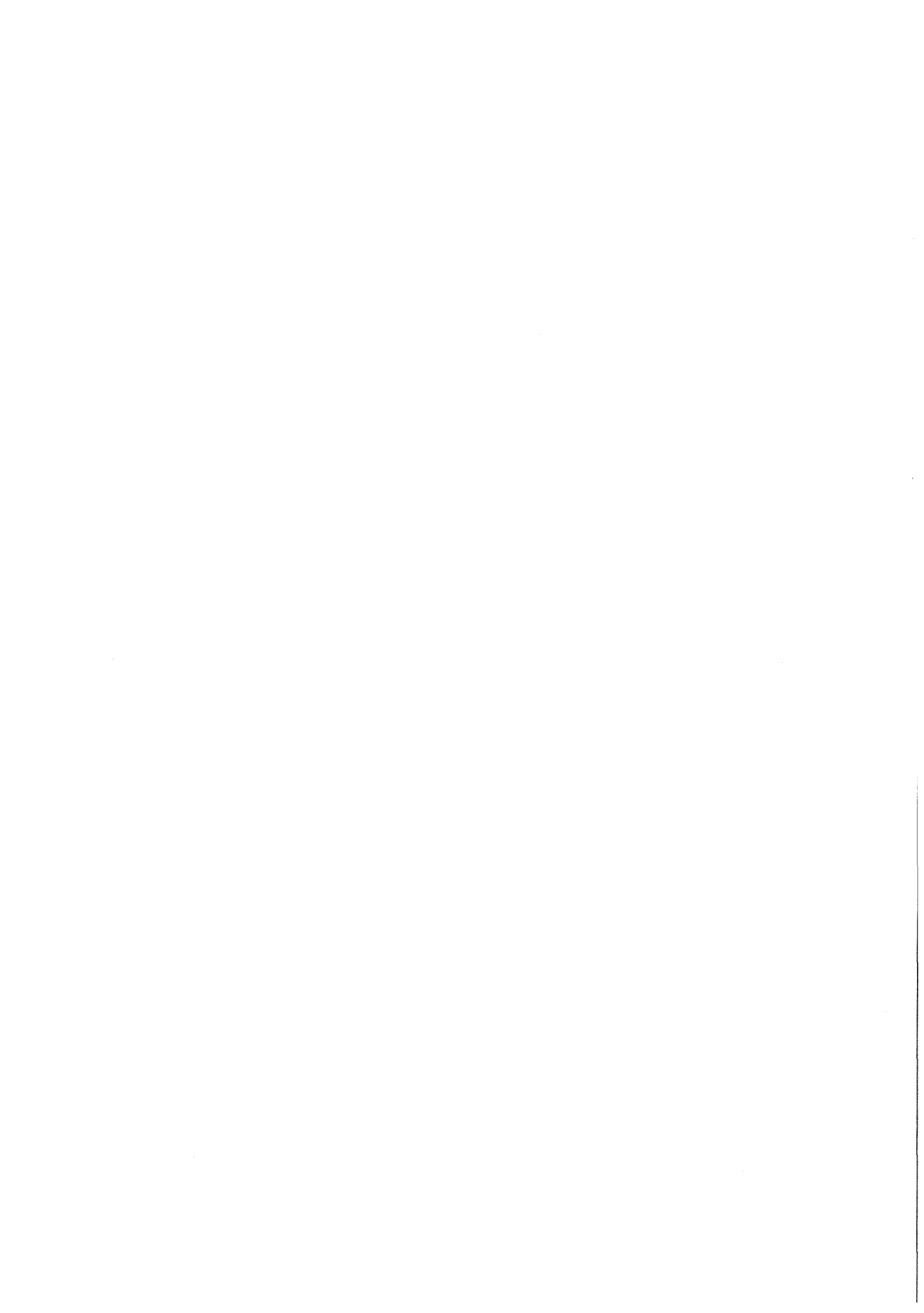
We would like to thank you for participating in the Environmental Impact Assessment (Scoping) process and for being part of the public participation process thus far.

Kind Regards

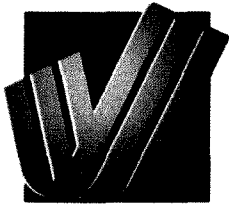
NICOLENE VENTER
Snr Public Participation Practitioner
SIVEST Environmental Division

tel (direct) +27 11 798 0635 tel (general) +27 11798 0600 fax +27 11 803 7272 cell 083 377 9112
email nicolenev@sivest.co.za website www.sivest.co.za

Consulting Engineers • Project Managers • Environmental Consultants • Town and Regional Planners
Durban • Johannesburg • Pietermaritzburg • Richards Bay • Ladysmith • Cape Town • Harare (Zimbabwe)



**ENVIRONMENTAL IMPACT ASSESSMENT AND
ENVIRONMENTAL MANAGEMENT PROGRAMME
DOUGLAS TAVISTOCK JOINT VENTURE'S PROPOSED
MIDDLEBURG WATER RECLAMATION PROJECT**



(MDEDET Ref No: 17/2/3/N28 and
DEA Ref No: 2/9/11/L492/6)



OPPORTUNITY TO COMMENT

**Final Scoping Report review and comment period
WEDNESDAY 25 MAY 2011 to TUESDAY 14 JUNE 2011**

**Please submit any written comments you may have regarding
this Final Scoping Report to the Public Participation Office**

**For more information and to register as an Interested
and/or Affected Party for the proposed project,
please contact:**

**Nicolene Venter / Andrea Gibb
Public Participation Office
SIVEST Environmental**

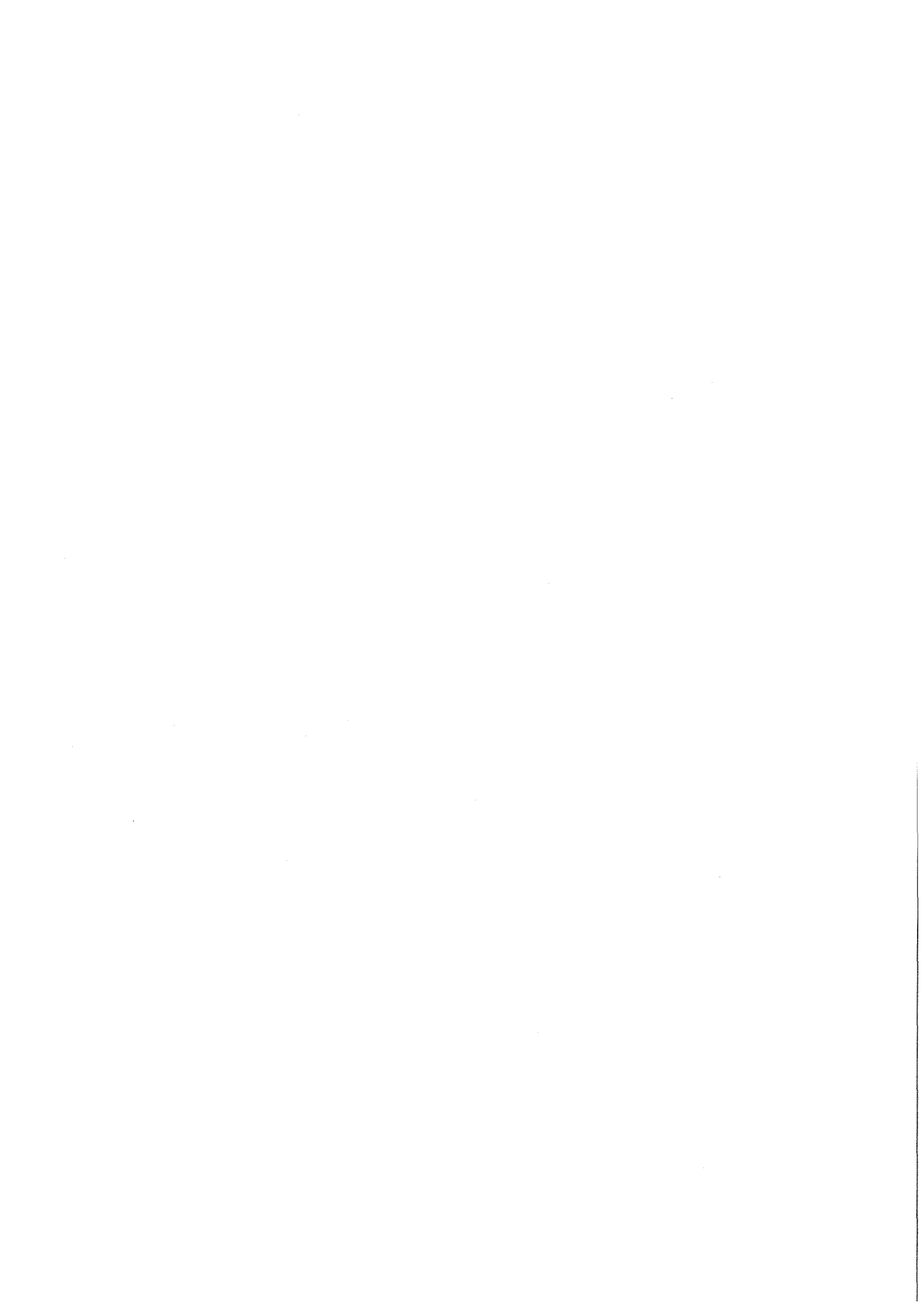
P O Box 2921, Rivonia, 2128

Email: nicolenev@sivest.co.za / andreag@sivest.co.za

Tel: (011) 798 0600

Fax: (011) 803 7272

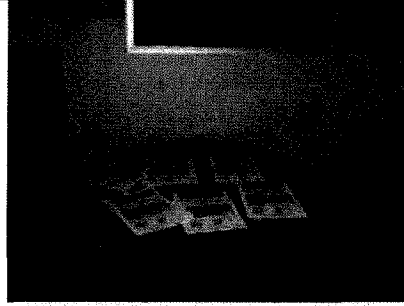

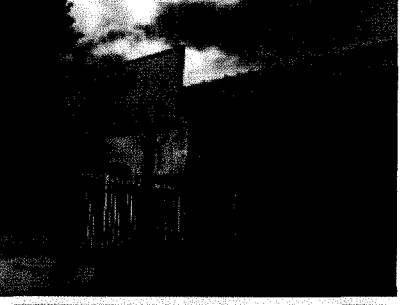
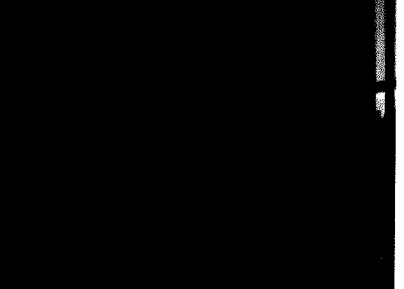
Due date for comments: TUESDAY 14 JUNE 2011



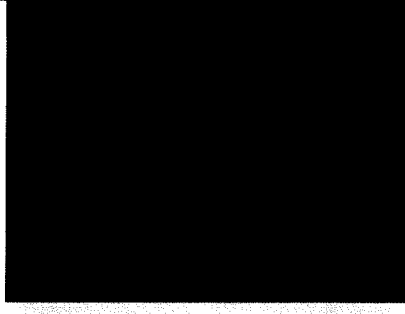



ENVIRONMENTAL IMPACT ASSESSMENT FOR THE DOUGLAS TAVISTOCK JOINT VENTURE'S PROPOSED MIDDELBURG WATER RECLAMATION PROJECT

Background Information Document place in public places and Posters displayed in public placing:


- EIA project notice
- Availability of the Draft Scoping Report for public review
- Invitation to Public Meeting

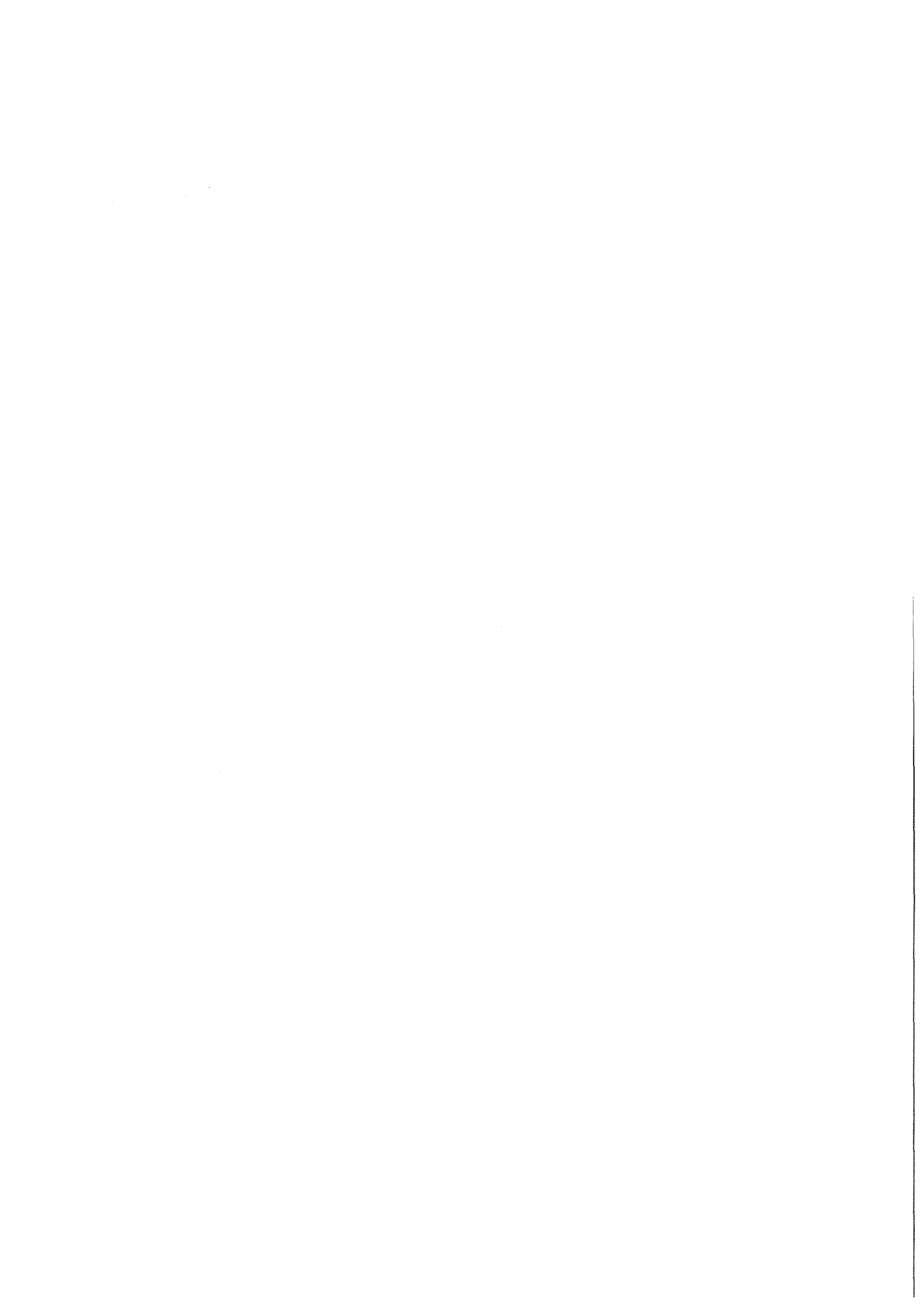
PUBLIC PLACE	COORDINATES	PHOTO
Gerard Sekoto Library Cnr Walter Sisulu & Wanderes Streets Middelburg 1050	S 25° 46" 24.41' E 29° 27" 24.63'	
Eastdene Library VerdoornStr Eastdene Middelburg 1050	S 25° 46" 55.5' E 29° 28" 38.6'	
Ext 7 Library 11881 MakataStr Mhluzi 1053	S 25° 45" 48.0' E 29° 25" 09.9'	
Nasaret Library Cnr Velddrift & Fort Napier Streets Nasaret Middelburg 1052	S 25° 48" 08.0' E 29° 30" 38.4'	

**ENVIRONMENTAL IMPACT ASSESSMENT FOR THE DOUGLAS
TAVISTOCK JOINT VENTURE'S PROPOSED MIDDELBURG WATER
RECLAMATION PROJECT**

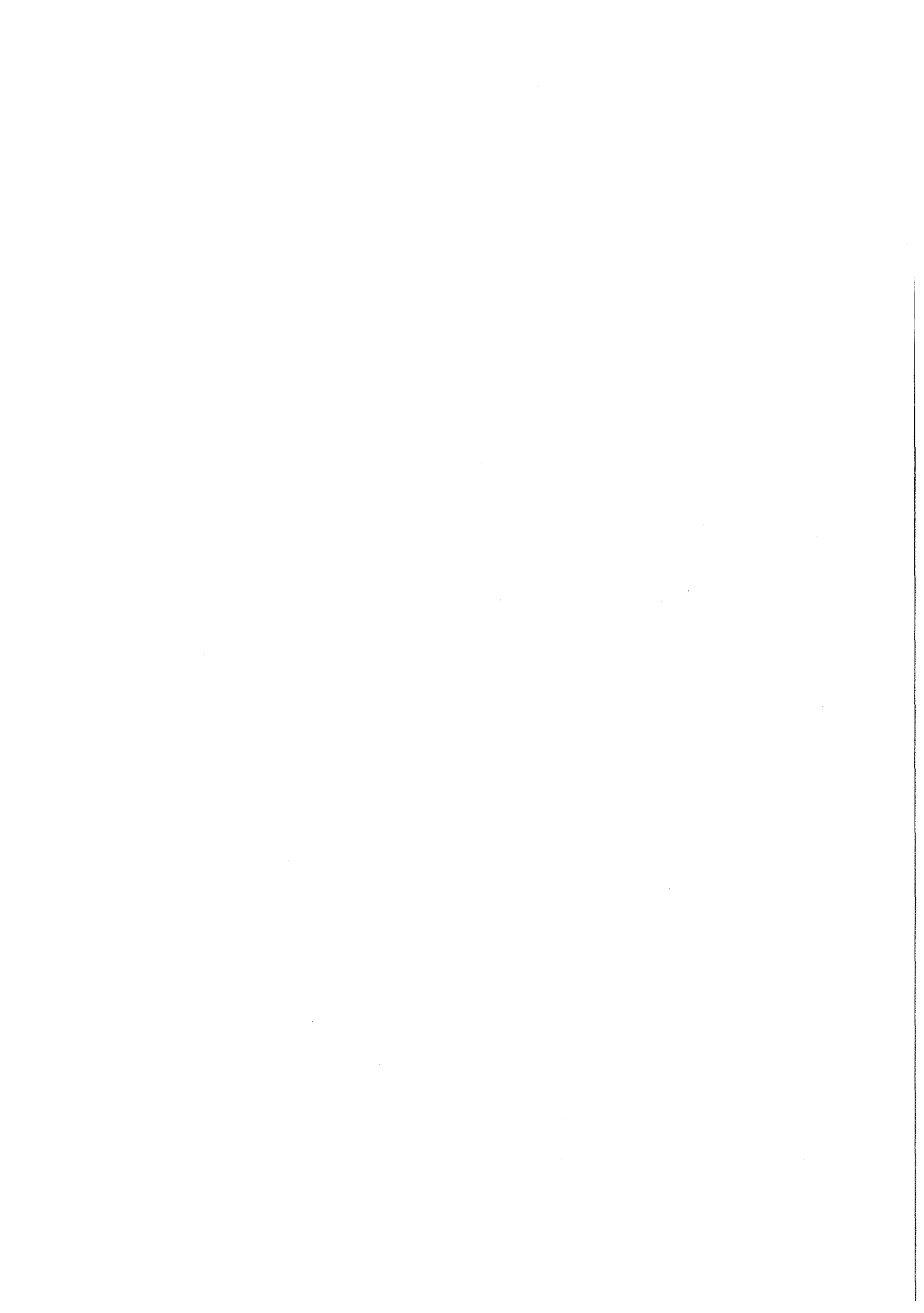
<p>Steve Tshwete Local Municipality Offices (Water & Electricity pay points)</p>	<p>S 25° 46" 21.53' E 29° 27" 13.66'</p>	
<p>BusMed Info Centre Middelburg Chamber of Commerce and Industry 292 Walter Sisulu Middelburg</p>	<p>S 25° 45" 15.46' E 29° 27" 31.20'</p>	
<p>Naledi Community (Mr Themba Mavuso) NUM Shop Steward 26 Inyange Naledi</p>	<p>S 25° 54" 35.31' E 29° 23" 31.96'</p>	<p>Gave to someone and he did not want me to take photos</p>
<p>Clubville Library</p>	<p>S 25° 45" 03.4' E 29° 26" 51.5'</p>	
<p>Bambanani Medical Centre, 186 Cowen Ntuli Street, Middelburg</p>	<p>S 25° 46" 09.79' E 29° 27" 39.38'</p>	

**ENVIRONMENTAL IMPACT ASSESSMENT FOR THE DOUGLAS
TAVISTOCK JOINT VENTURE'S PROPOSED MIDDELBURG WATER
RECLAMATION PROJECT**

Medical Centre, Mhluzi, Maledi Street	S 25° 45" 25.04' E 29° 25" 39.11'	
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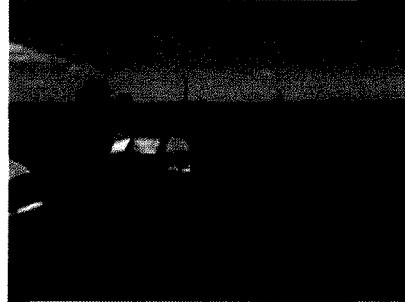
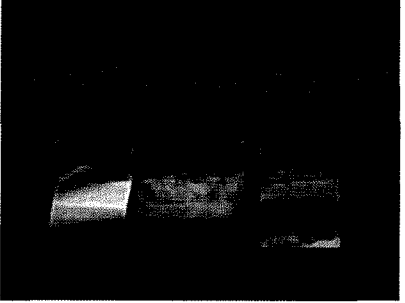






B.5 Site Notices



**ENVIRONMENTAL IMPACT ASSESSMENT FOR THE DOUGLAS
TAVISTOCK JOINT VENTURE'S PROPOSED MIDDELBURG WATER
RECLAMATION PROJECT**

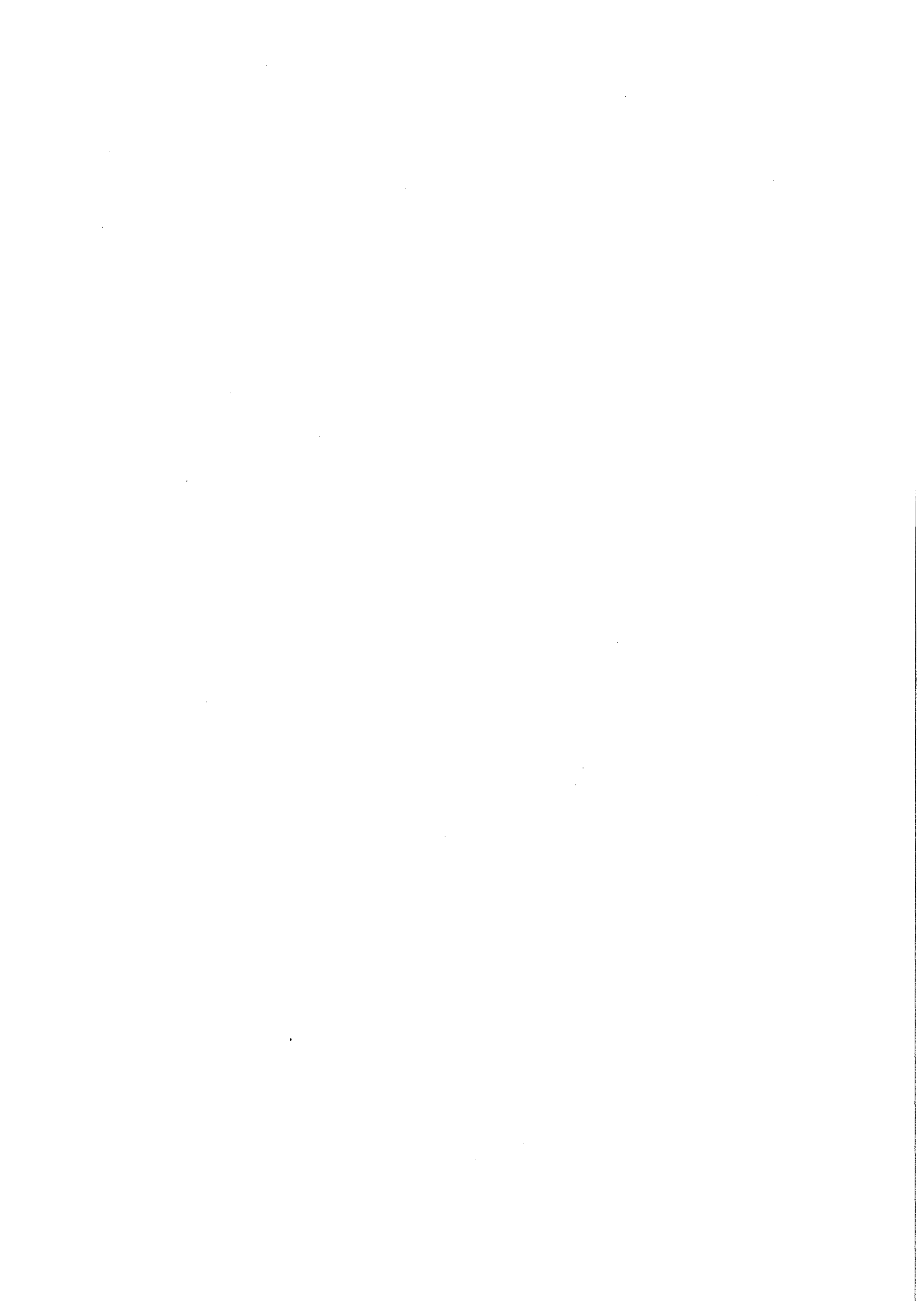
EIA Site Notices

DESCRIPTION	COORDINATES	PHOTO
Option 1: At the gate of the Naledi Village	S 25 54 36.4 E 29 23 30.3	
		
		
Option2: Fence close to Kruger Dam (on mine property)	S 25 50 53.84 E 29 26 48.58	

**ENVIRONMENTAL IMPACT ASSESSMENT FOR THE DOUGLAS
TAVISTOCK JOINT VENTURE'S PROPOSED MIDDLEBURG WATER
RECLAMATION PROJECT**

B.6 Newspaper Advertisements – Announcement Phase



**NOTICE OF A SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT FOR
DOUGLAS TAVISTOCK JOINT VENTURE'S PROPOSED MIDDELBURG
WATER RECLAMATION PROJECT**

**Mpumalanga Department of Economic Development,
Environment and Tourism (MDEDET)
Reference Number: 17/2/3/N28**

Department of Environmental Affairs (DEA) Reference Number: 12/9/11/L492/6

YOUR COMMENTS INVITED

Douglas Tavistock Joint Venture (DTJV), a BHP Billiton Energy Coal South Africa and Tavistock Collieries joint venture, proposes to design, construct and operate a mine water reclamation plant on mine property near Middelburg in the Mpumalanga Province. The proposed project will entail the collection, treatment and discharge of mine water into the Upper Olifants River catchment. The main objective of the proposed project is to treat excess impacted mine water to acceptable standards and make it available for re-use in the catchment.

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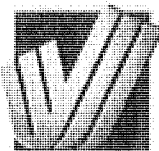
P O Box 2921

Rivonia, 2128

Tel: (011) 798 0600

Fax: (011) 803 7272

email: andrea@sivest.co.za



JT12 - 9529 ENG SOWETAN . pdf

Approved. 2011/02/01

Moore

**NOTICE OF A SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT FOR
DOUGLAS TAVISTOCK JOINT VENTURE'S PROPOSED MIDDELBURG
WATER RECLAMATION PROJECT**

**Mpumalanga Department of Economic Development,
Environment and Tourism (MDEDET)
Reference Number: 17/2/3/N28**

Department of Environmental Affairs (DEA) Reference Number: 12/9/11/L492/6

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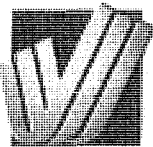
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JT12 - 9529 SIVEST ENG .pdf

Approved 2011/02/01

Hoore

**KENNISGEWING VAN 'n BESTEKOPNAME EN OMGEWINGSIMPAKSTUDIE
VIR DIE DOUGLAS-TAVISTOCK GESAMENTLIKE ONDERNEMING SE
VOORGESTELDE MIDDELBURG WATERHERWINNINGSPROJEK**

**Mpumalanga Departement Ekonomiese Ontwikkeling,
Omgewingsake en Toerisme (MDEDET)
Verwysingsnommer: 17/2/3/N28**

Departement Omgewingsake (DEA) Verwysingsnommer: 12/9/11/L492/6

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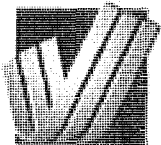
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JT12 - 9529 APR. pdf

Approved 2011/02/01

Hoore

Are you registered to vote yet?

The municipal elections are around the corner. The 2011 municipal elections will take place in eight metropolitan councils, 226 local councils, 44 district councils and 4 277 wards.

The Independent Electrical Council has established 20 888 voting districts for this purpose, with 633 of the voting districts serving as voting centres and dedicated to servicing densely populated voting districts.

All the 20 888 voting districts will have their stations open for registration over the weekend of February 5 and 6 from 08:00 to 17:00 on each day. Just over 60 000 registration officials have been trained for the voter registration weekend and no less than 196 000 staff members will be recruited for Election Day.

Party Liaison Committees have been consulted to ensure that presiding and deputy presiding officers comply with the criteria set for their appointment and that they would indeed discharge their responsibility impartially, efficiently and with distinction.

An SMS facility has been made available to voters to check their registration details through a cell phone. This facility is user-friendly and is available on all three networks, namely Vodacom, MTN and Cell C. All that a voter has to do is to type in his/her identity number and send it to 32810 on all three networks and he/she will in return receive confirmation of his/her registration details.

In addition registration details can be verified at any time through the 'Am I registered?' facility on the IEC website at www.elections.org.za. Voters can check whether they are registered and if not, where they should register.



You can go and register at one of the following stations

- | | |
|-------------------------------------|--|
| Sibongamandla High School | Kendal Power Station |
| Fire Station | Langeul Combined School |
| Recessfontein Ministries | Salmoral School |
| Rayno Rif Primary School | Temporary voting station (Teador Café) |
| Kilfontein Primary School | Ogles council offices |
| Patriot High School | Thlolulwazi protective workshop |
| Tsabelpark Primary School | Thuthukani Primary School |
| Durbanpark Primary School | Sukumani Primary School |
| Pine Ridge Combined School | Mehlwana Secondary School |
| Phillip Ndumande Secondary School | Mabanda High School |
| Admin Paying Point ext 6 | Mafia Coal multipurpose hall |
| Edwani Mavhaka Primary School | Kwamala Primary School |
| Hlalanikahle Administration Offices | Bonani Primary School |
| Zacheyu Malazu Secondary School | Rietspruit Recreation Club |
| Kwasigaba Primary School | Imbalenhle School |
| Empuukwani Secondary School | Mpumalanga Regional Training Trust |
| Hotel 1 Office Tushaneng | Temporary voting station (Kwasigaba ext 11) |
| Kopanzano High School | Temporary voting station (Hlalanikahle council clinic) |
| Magobane Combined School | Basilinde Higher Primary School |
| Panorama Primary School | Temporary voting station (Gunner football ground) |
| Clewer Primary School | Springbok School Mine |
| Witbank Primary School | Temporary voting station (Hlalanikahle ext 2) |
| Kwaqusa maintenance depot | Makause Combined School |
| Phakama Combined School | Khonzimundo Primary School |
| Sibukosethu Primary School | Wf de Klerk School |
| Sonainimbi Secondary School | Temporary voting station (Open space Hlalanikahle ext 3) |
| Mpondozankomo FET College | Temporary voting station (Hlalanikahle ext 2) |
| City Hall Civic Centre | Alex Mampema Intermediate School |
| Korfbal club of Witbank | Sivathela Early Learning Association |
| Portuguese Hall | Lynnville Community Hall |
| Itereleng Primary School | Temporary voting station (Thembalomphakathi taxi rank) |
| TMV Property | Licensing office Witbank |
| Ishwane University of Technology | Temporary voting station (soccer field Old Coronation) |
| ST Thomas Aquinas School | J Kenanda Primary School |
| Tesileles Primary School | Blackhill Schoonagelzigh Primary School |
| Witbank Primary School | Temporary voting station (Greenlight general dealer) |
| TP Sillilo High School | Mopuli Makusa Primary School |
| Vikelwa Industrial School | Kriel High School |
| Emphakathini Hall | Bongantlanihla Primary School |
| Life Restoration Church | Christma Conference Centre |
| Larkakel Kriel Park | Jeremie Makoa Primary School |
| Greenside Recreation Centre | Spring Valley School |
| Lehaka Intermediate School | Nelson Ngobeni Primary School |
| Colliers Training College | Open space ext 18 (opposite City West dry cleaners) |
| Le-Paffis Auberge cc | Open space ward 14 |
| Rock of Ages Church | Puma Stadium |
| Alliance Church | Living Word Church |
| Technical High School Witbank | Temporary voting station (open space in Voerman opposite etan) |
| Dunbar Primary School | Köhler Delta agents |
| Hlalanikahle Community Hall | Temporary voting station (Klarinet multipurpose sports ground) |
| Sicabille Disabled Centre | Maloma Primary School |

NOTICE OF A SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT FOR DOUGLAS TAVISTOCK JOINT VENTURE'S PROPOSED MIDDELBURG WATER RECLAMATION PROJECT

Mpumalanga Department of Economic Development, Environment and Tourism (MDEDET)
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You have the right to vote

Voters have the right to a secret vote, no one may know who you voted for. Voters have the right to choose, no one may force, intimidate or bribe a voter to vote or not vote for a party. Voters have the right to vote, no one may stop you from voting by forcing you to work or by preventing you from getting to the voting station. Voters have a right to get information from parties, no one may stop parties or candidates from reaching voters.

Registration works like this

You need a green ID book with a bar code (issued after 1986) or a temporary ID document. Go to the voting station on a public registration day (or the municipal office on a normal working day) and fill in a form to show that you live in the area. A special machine (Zip-Zip) will be available in each voting district - it can read the bar code in your ID book and automatically records the correct information about your name and ID number for the voter's roll. The machine also prints a sticker that will be pasted in your ID book to show that you have registered at that voting station. The IEC has the whole voters' roll on one national computer and when you register the computer will check if your ID number already appears somewhere else. If it does, the computer will automatically cancel your registration at your old voting district and only accept the latest registration.

MAGNUM METALS

THE BEST IN TRUCKS, DOZER'S, FRONT END LOADERS, HYDRAULIC HAMMERS, EXCAVATORS, GRADERS, 10 CUBE TIPPER TRUCKS, 20 CUBE TIPPER TRUCKS, REFUGE AND RUBBLE BINS, CRANE-HIRE, SCRAP FOR CASH

501 240 1400 (011) 240 2420
 Fax: (011) 240 2791 Email: info@magnummetals.net
 7 Heerweg Street, Middelburg Free quotations

Bababas kan pryse wen

'n Inskrywingsvorm verskyn in vandag se uitgawe.

Die jaarlikse Walto Foto's en Middelburg Observer babakompetisie het weer afgeskop en die eerste agttien inskrywings is ontvang.

Die sluitingsdatum is op 16 Maart waarna al die babatjies in die uitgawe van 17 Maart gepubliseer gaan word.

Lesers kry dan die kans om tot 8:00 op 24 Maart per sms vir hulle gunsteling te stem. Die uitslag word in die uitgawe van 24 Maart bekend gemaak, met die prysuitdeling op 28 Maart 2011.

Lesers kan by Walto Foto's gaan inskryf teen R50 wat drie foto's insluit.

'n Inskrywingsvorm verskyn in vandag se uitgawe.

■Eerste prys in elke kategorie is R500, tweede prys R250 en derde prys R100.



Charmone van Vuuren.



Banksie du Preez.



Allison Leigh Joubert.



Mia Duvenage.



Su-nico Loots.



Karlia Kruger.



Reinhardt van der Walt.



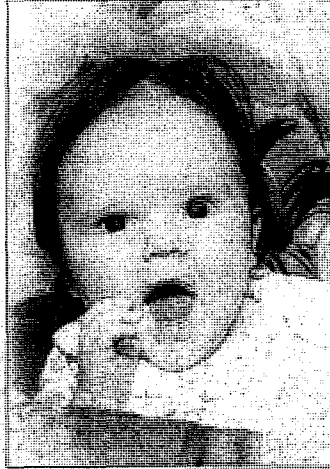
Leonard Weyers.



Vuyile Mahlangu.



Giovanni Weyers.



Rouchette le Roux was een van die eerste inskrywings vir die jaarlike babakompetisie.



Anke Goosen.



Nadine Roodt.



Gareth Zefelle.



Owethu Mazwayi.



Louis Botha.



Mthukho Mokwena.

NOTICE OF A SCOPING AND ENVIRONMENTAL IMPACT ASSESSMENT FOR DOUGLAS TAVISTOCK JOINT VENTURE'S PROPOSED MIDDELBURG WATER RECLAMATION PROJECT

Mpumalanga Department of Economic Development, Environment and Tourism (MDEDET)
Reference Number: 17/23/N22

Department of Environmental Affairs (DEA) Reference Number: 12/9/11/L492/6

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KENNISGEWING VAN 'n BESTEKOPNAME EN OMGEWINGSIMPAKSTUDIE VIR DIE DOUGLAS-TAVISTOCK GESAMENTLIKE ONDERNEMING SE VOORGESTELDE MIDDELBURG WATERHERWINNINGSPROJEK

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SIVEST



Akulalwa

WHAT'S UP
WHO'S HOT

Our Girls party with the stars. To hook up with them call 011-340-3962 or email: akulalwa@sowetan.co.za



The good and the bad of Met

WE GIRLS love to party so off we went to Cape Town for the Met.

But we are sure you have heard all there is to hear, so let us show you, the good, the bad of the Met

Noleen-Maholwana Sanqu looked amazing in a green fitted and long gown by Gert-Coetzee, while Bonang Mathaba looked disastrous in the outfit from the same designer. She looked like Lady Gaga on crack. Like she wore wheels around her waist - it was disastrous.

Joey Rasdien has a fiancé and she arrived in white shoes that broke during the J&B Met. Rasdien was seen asking folk for adhesive tape or glue to fix the shoes, which were clearly not expensive.

On the other side of the tent was Uyanda Mbuli in a pair of studded black shoes, which cost about R30 000. These did not break and she was not seen going around asking for adhesive tape.

Oh, Chester Williams looked like a member of the Coon Carnival and though we warned him, he looked hideous. He still grinned as if it were his birthday, so we left him alone.

● Speedy and that towel were everywhere. Like a Xhosa initiate, he walked up and down with the towel. His concept of the theme Larger than Life were a pair of jeans, sneakers and the towel - eish.

● Somizi Mhlongo wore an outfit that resembled a matadors, but unlike the Spanish bullfighters the choreographer had foundation streaming down his face like a woman. He won best-dressed with Uyanda Mbuli, who also looked amazing in a red- and-



DISASTROUS: Live Presenter Bonang Mathaba at the J&B Met in Cape Town. PHOTO: ELVIS KANYELEZENI

girls found it a bit funny as that metro had their right next door the night before.

But alas, because Met had had a boozie for much longer in the evening, we girls dumped Bujee and his studded head.

Yes, he actually glued plastic gems to his head. Shame he lost his bag the next day and went around asking folk if they had not Steel it. We guess if he had said steal, they would have understood him.

It was funny to see Sophie Ndaba's ex-boyfriend Tshapho. Shame, remember everyone was talking about their love affair and how lucky she was with an Usher lookalike. Well, we ladies can confirm

that the love affair is over. We wondered what Ndaba meant when she referred to him as her soul mate when the relationship did not even last a month.

● Teunis Crous and Primrose were there in pink and we were all glad Teunis was not wearing

skinny jeans since it is a slight that always makes us vomit.

Winnie Khumalo looked amazing all weekend long, even wearing what looked like a matric gown, when folk were at a dinner in jeans. Khumalo was the sweetest the whole weekend.

FREE SPRIT: Speedy at the Met. PHOTO: ELVIS KANYELEZENI

STARS OUTDO EACH OTHER AT CAPE TOWN EVENT



FUN: Somizi Mhlongo with Uyanda Mbuli
PHOTO: ELVIS KANYELEZENI

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Mpumalanga Department of Economic Development, Environment and Tourism (MDEDET)
Reference Number: 17/23/N28

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AMAZING: Winnie Khumalo and Abraham Mthiyane
PHOTO: EDDIE MISWENI

black Diamond Face Couture outfit. They won make-up, an overseas trip and loads of beauty products that made us feel sick with jealousy.

Bujee of Yfm was a great MC at the opening Met party the night before but, what we

B.7 Newspaper Advertisements – Scoping Phase

**ENVIRONMENTAL IMPACT ASSESSMENT FOR DOUGLAS
TAVISTOCK JOINT VENTURE'S PROPOSED MIDDELBURG
WATER RECLAMATION PROJECT (MWRP)**



**NOTIFICATION OF DRAFT SCOPING
REPORT AND INVITATION TO
PUBLIC MEETING**
(MDEDET Ref. No: 17/2/3/N28
and DEA Ref. No: 12/9/11/L492/6)

SIVEST

The EIA notices advertised in February 2011 whereby notice was given that the Douglas Tavistock Joint Venture (DTJV) (a BHP Billiton Energy Coal South Africa (Pty) Limited and Tavistock Collieries (Pty) Limited joint venture) proposes to design, construct and operate a mine water reclamation plant on mine property near Middelburg in the Mpumalanga Province, have reference.

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Steve Tshwete Municipal Area	Middelburg Mines	Adjacent to Middelburg - Van Dyk's Drift Road, R575	Lindie Moore 013 689 3051
Steve Tshwete Municipal Area	Naledi Village	Adjacent to Middelburg - Van Dyk's Drift Road, R575	Lindie Moore 013 689 3051
Steve Tshwete Municipal Area	Gerard Sekolo Public Library	Wanderers Avenue, Middelburg	013 249 7297
Steve Tshwete Municipal Area	Mhluzi Library	Ngwako Street, Mhluzi	013 242 1030
Steve Tshwete Municipal Area	Eastdene Library	Verdoorn Street, Middelburg	013 249 7275

I&APs are also invited to attend the Public Meeting to be held on:

DATE	TIME	VENUE
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The purpose of the Public Meeting is to present the proposed project to the public, provide I&APs with the opportunity to interact with the project team, and to raise any further comments and/or concerns they might have regarding this proposed project.

Please direct your enquiries or comments in writing to the Public Participation Consultants below:

Nicolene Venter or Andrea Gibb
SIVEST Environmental
P O Box 2921
Rivonia, 2128
Tel: (011) 798 0600
Fax: (011) 803 7272
email: andrag@sivest.co.za

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Approved. *[Signature]*
2011/02/11

**OMGEWINGSIMPAKSTUDIE VIR DOUGLAS TAVISTOCK
GESAMENTLIKE ONDERNEMING SE VOORGESTELDE
MIDDELBURG WATERHERWINNINGSPROJEK (MWRP)**



**KENNISGEWING VAN 'N KONSEP-
OMVANGSVERSLAGEN
UITNODIGING NA 'N OPENBARE
VERGADERING**
(MDEDET Verw. Nr: 17/2/3/N28
en DEA Verw. Nr: 12/9/11/L492/6)

SIVEST

Die Omgewingsimpakstudie kennisgewings wat in Februarie 2011 geadverteer is, waarin kennisgewing geskied het dat die Douglas Tavistock Gesamentlike Onderneming (DTJV) ('n BHP Billiton Energy Coal Suid-Afrika (Edms.) Bpk. en Tavistock Collieries (Edms.) Bpk. gesamentlike onderneming) die ontwerp, oprigting en bedryf van 'n mynwaterherwinnings-aanleg voorstel op myngrond naby Middelburg in die Mpumalanga Provinsie, verwys.

Ingevolge Staatskennisgewing R 544, R 545 en R 546, gepubliseer op 18 Junie 2010, word alle belangstellende en/of geaffekteerde partye (B&GPs) hiermee verwittig dat die Konsepomvangsverlag vir die MWRP by die onderstaande plekke (in gedrukte vorm), op Jones & Wagener se webwerf (<http://www.jaws.co.za>) en op CD (op skriftelike versoek) beskikbaar gestel sal word vir besigtiging en kommentaar tydens die kommentaartydperk vanaf Dinsdag, 15 Maart 2011 tot Dinsdag, 19 April 2011 (teen sluitingstyd):

GEBIED	PLEK	STRAATAADRES	KONTAKNR
Steve Tshwete Munisipale Gebied	Middelburg Myn	Langs Middelburg - Van Dyk's Driepad R575	Lindie Moore 013 689 3051
Steve Tshwete Munisipale Gebied	Naledi Village	Langs Middelburg - Van Dyk's Driepad R575	Lindie Moore 013 689 3051
Steve Tshwete Munisipale Gebied	Gerard Sekoto Openbare Biblioteek	Wandererslaan, Middelburg	013 249 7297
Steve Tshwete Munisipale Gebied	Mhluzi Biblioteek	Ngwakostraat, Mhluzi	013 242 1030
Steve Tshwete Munisipale Gebied	Eastdene Biblioteek	Verdoomstraat, Middelburg	013 249 7275

B&GPs word ook uitgenooi om die Openbare Vergadering by te woon wat gehou word op:

DATUM	TYD	PLEK
Saterdag, 12 Maart 2011	10:00 tot 12:00	BusMidOuditorium, Walter Sisulustraat (Kerkstraat), Middelburg

Die doel van die Openbare Vergadering is om die voorgestelde projek aan die publiek bekend te stel, om B&GPs die geleentheid te bied om met die projekspan te skakel en om enige verdere kommentaar en/of knelpunte wat hulle rakende hierdie voorgestelde projek mag hê, te opper.

Rig asseblief u skriftelike navrae of kommentaar aan die Openbare Deelnamekonsultante hieronder:

Nicolene Venter of Andrea Gibb
SIVEST Environmental
Posbus 2921
Rivonia, 2128
Tel: (011) 798 0600
Faks: (011) 803 7272
epos: andreag@sivest.co.za

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Approved. *Moore*
2011/02/11

Don Makatle

A CONTROVERSIAL company with links to late businessman Sandile Majali is taking the City of Tshwane to court over a R122 million closed circuit television tender it lost to a rival bidding company.

The matter between Omega Risk Solutions and the Tshwane Metro will be heard on March 14 and 15 before the Pretoria high court.

The CCTV system in question forms part of the Pretoria security network aimed at protecting leaders in government as well as visiting dignitaries, tourists and the public.

But a cursory glance at the profile of Omega makes it an unlikely guardian of the capita's security network.

The man at the helm of Omega, chief executive Alex de Witt, is a former SADF colonel.

About five years ago, 16 of the company's employees were reportedly arrested in the Democratic Republic of Congo on suspicion of plotting a coup.

The company was quick to deny that it was involved in any mercenary activity in the DRC after the men were later released.

The company's relationship with Majali, who was found dead in his hotel room in Sandton last December, started in 2004.

At the time of his death, Majali's house already belonged to De Witt through his other company, which was bought as early as 2007.

So when Majali put up the house as security to secure bail, he was actually committing fraud. Thus, De Witt allegedly claims, he was unaware of. He had cut ties with Majali a few good years before the controversial businessman's death.

But according to Majali's lawyer John Ngebetsha, his client still

R122m TENDER ROW



Omega, an unlikely guardian of security network, sues city

UNDER THE GUN: A man fixes electrical wires next to a destroyed police patrol car in Baghdad, Iraq, in 2009. Iraq at the time was fertile ground for security firms like Omega Risk Solutions. PHOTO: AP

owned a 25 percent stake in Omega at the time of his death.

While Majali first came into the limelight with his R11 million donation to the ANC after his sanction-busting oil dealings with Iraqi dictator Saddam Hussein's regime, Omega would make its own footprint in Iraq after the US-led invasion.

According to reports, Iraq at the time was fertile ground for private security firms employing thou-

sands of foot soldiers to guard officials, oil wells, government buildings and banks.

Omega was a player here with such private security companies as Halliburton, DynCorp, Global Risk Strategies, Edinburgh Risk Inc, Blackwater and others. With the potential to earn as much as \$1 000 (about R7 200) a day, many operatives saw this booming business as the proverbial offer not to be refused.

In 2004 Omega was losing men in

Iraq. Johan Botha and Louis Campher died when their convoy came under fire while they were travelling between construction sites near the then volatile capital Baghdad.

Other South Africans not connected to Omega also died in the war that toppled Saddam.

The Pretoria-based Institute for Security Studies had warned at the time that "any person in Iraq runs a very high risk of being killed". But the spoils of the war were too

great and outweighed the risks. According to estimates from the then Foreign Affairs department, now International Relations and Co-operation, there were more than 4 000 South Africans employed in Iraq at the time.

At 35 casualties by October 10 2010, South Africa had the third highest number of private military contractors who had died in Iraq. Among them Francois Strydom, who was killed by a suicide bomber in Baghdad, were linked to Omega.

Omega's name cropped up in Parliament in 2007 when the former DA leader Tony Leon asked if the Department of Foreign Affairs used the services of private security firms. Paid a whopping R1 486 487, Omega was almost the highest paid firm used by the department.

In 2009 *The Herald* reported that the Nelson Mandela Bay Municipality had decided to terminate the contract of Omega to monitor the CCTV cameras in the CBD with effect from December of that year.

Granted Omega are not small boys in the hi-tech surveillance industry. Their Technology Solutions managing director bragged that they had "provided a system to the City of Johannesburg that is double the size of the previous CCTV system, but is only at 75 percent of the cost of the previous system".

But they carry a lot of baggage that they hope to convince the court with when Case No 27707/2010 comes before court on March 14 that it should - and must - not count against them.

This is despite the fact that an audit report had said Omega's bid for the Tshwane job was rejected because "it did not comply with tender conditions and misrepresented facts to influence the awarding of the tender".

ENVIRONMENTAL IMPACT ASSESSMENT FOR DOUGLAS TAVISTOCK JOINT VENTURE'S PROPOSED MIDDELBURG WATER RECLAMATION PROJECT (MWRP)



NOTIFICATION OF DRAFT SCOPING REPORT AND INVITATION TO PUBLIC MEETING
(MDEDET Ref. No: 17/2/3/N28 and DEA Ref. No: 12/9/11/L492/6)

SIVEST

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Students' financial aid scheme undergoes restructuring

Tebogo Monama

THE Department of Higher Education has started restructuring the National Student Financial Aid Scheme.

A call for nominations for new board members closed on Monday. New members will be announced by the end of March.

Minister of Higher Education Blade Nzimande has asked the NSPFA to produce a recovery plan to address the issues. The three-year recovery plan the NSPFA released was deemed inadequate.

Nzimande said: "Restructuring of the NSPFA board has begun to ensure the relevant expertise and skills needed to govern an organisation like NSPFA." The final report of the review of the NSPFA commissioned by Nzimande indicated that the scheme faced organisational, structural and policy challenges.



FOCUS: Minister Blade Nzimande

The review committee found that NSPFA allowed interest to accrue on loans in excess of what is permissible in law. "Exacerbating this practice was the fact that some of the older loans may be prescribed, rendering them un-enforceable in law and thus not recoverable."

"The erroneous calculation of the interest income resulted in a misstatement of R181 million, affecting the materiality of the audit. Audit evidence did not support a reconciling amount of R42 million between the general ledger and student loans in the system," Nzimande said.

The auditor-general disclaimed NSPFA's 2009-10 financial statements. "I was not able to obtain sufficient appropriate audit evidence to provide the basis for an audit opinion," the auditor-general wrote in his report to Parliament on the statements for the year ending March 2010.

The scheme received nearly R2 billion in last year's budget. It is expected that on top of their regular budget this year, it will be given a further R1.6 billion to fund two new initiatives announced by President Jacob Zuma in January.

Thousands of taxis scrapped since 2006

Katlego Moeng

SINCE October 2006 more than 38 500 taxis have been scrapped off South African roads as part of the taxi recapitalisation process.

On Tuesday *Sowetan* witnessed taxis being reduced to scrap - a sight that would put a smile on the face of any commuter who has travelled in a coffin

on wheels.

The Taxi Scrapping Administrator (TSA) has paid out about R2,05 billion to taxi operators so far.

TSA chief executive officer Visham Naidoo said the current scrapping allowance payout rate on the taxi recap process was R57 400 and was adjusted according to inflation each year.

"The only requirements is that the applicant has to have a valid operating licence, must be the owner of the vehicle and the vehicles must have been manufactured before July 2006."

"We started this process during a very politicised time in the taxi industry with National Taxi Association (NTA) and South African

National Taxi Council (Santaco) not seeing eye to eye, so there was initially a lot of resistance," Naidoo said.

"The taxis that have recapped are not necessarily unroadworthy."

"Some operators recapped because they get new vehicles, which means less maintenance costs and less time off the road being repaired."

• gemeenskapsnuus

Future of children secured by riders

Coal Train Riderz (CTR) restored the hope of underprivileged families and children, by providing shoes to needy pupils.

The event was hosted at KwaGqoka municipality where Emaahleni FM provided the venue.

CTR's initiative of donating shoes is a project together with the mayor's office. The occasion was held on Saturday, February 12 with Interim Mayor of Emaahleni, Cllr Lesley Nhlapho, Manager of Transvesal Trudy Xhala, members of the Mayoral Committee Cllrs Conny Simelane and Fanie Sithole.

"Bill Gates never had money, but an idea to solve our communication problems. With his idea succeeding, he became rich. Coal Train Riderz has also done the same. They never had bags and bags of money to help underprivileged children, it was their idea that brought change to the lives of these children. I would like to thank everyone who took part in changing and securing the future of these children. We will soon see this project grow, maybe having a school uniform day, as this is just the beginning," said Cllr



President of Coal Train Riderz helps distribute shoes to pupils at the Coal Train Riderz Shoe Run in KwaGqoka on Saturday, February 12.

Nhlapho.

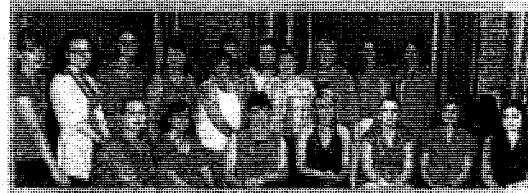
Children, some in the company of their parents, each received a pair

of shoes. More than 100 pairs of shoes were distributed, with some passed to other charity organisations in the community.

"We as Coal Train Riderz discussed this predicament, as it is not a pleasing sight to see children walk barefoot to school. We decided to raise funds for shoes, to cover the feet of these underprivileged pupils in our community. Beyond providing shoes, we have put smiles on the faces of these children. Now they can look forward to going to school and be like other children," said a member of CTR, Mr Chris Makama.

"We would like to thank everyone who contributed to make a change in the lives of these children. In near future I want to see this project grow 10 times bigger. We will be having Blanket Run for winter and hope to receive much more support for future projects," said president of CTR, Mr Thabo Nkosi.

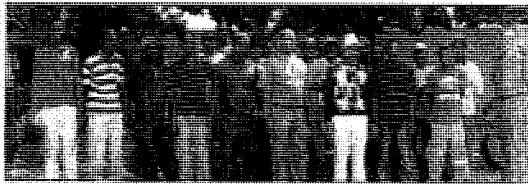
CTR ran a project in 2009 called 'My Child Is Your Child', where BHP Billiton donated money for two orphanage homes in KwaGqoka. Each home received R3 000 after the event.



Some of the riders

Some of the riders at the Coal Train Riderz Shoe Run in KwaGqoka on Saturday, February 12. The riders were seen at the event, which was held at the Emaahleni FM venue. The riders were seen at the event, which was held at the Emaahleni FM venue. The riders were seen at the event, which was held at the Emaahleni FM venue.

Parolees give back to community



Some of the parolees at Elkana School on Saturday, February 12 with them are L. Skosana (Manager of Corrections Care), Mr C. van der Nest (unit manager) and Mr S. Sedibo (supervision officer).

Parolees from eMalahleni and Ogies helped out at Elkana School on the weekend.

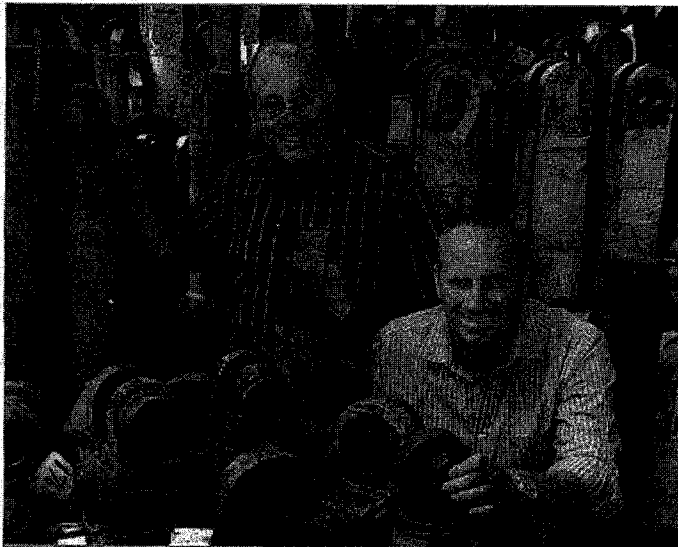
On Saturday, February 12 a team from the Witbank Community Correctional Services arrived at Elkana in full force and their aim for the day was to do general main-

tenance at the school.

The parolees have to do 16 hours of community service a month.

"The community benefits by the services," said Mr L. Skosana, Manager of Correctional Care.

"It's a way they give back to the community," he continued.



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ENVIRONMENTAL IMPACT ASSESSMENT FOR DOUGLAS TAVISTOCK JOINT VENTURE'S PROPOSED MIDDELBURG WATER RECLAMATION PROJECT (MWRP)



NOTIFICATION OF DRAFT SCOPING REPORT AND INVITATION TO PUBLIC MEETING
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SIVEST

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B.8 Comments and Response Report

ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR THE DOUGLAS TAVISTOCK JOINT VENTURE'S PROPOSED MIDDELBURG WATER RECLAMATION PROJECT
(MDEDET Ref No: 12/2/3/N28 and DEA Ref No: 12/9/11/L492/6)

Environmental Impact Assessment – Scoping Phase

ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

COMMENTS AND RESPONSES REPORT – FINAL SCOPING REPORT

DOUGLAS TRAVISTOCK JOINT VENTURE'S PROPOSED MIDDELBURG WATER RECLAMATION PROJECT

SUMMARY OF ENVIRONMENTAL ISSUES/CONCERNS AND SUGGESTIONS RAISED BY INTERESTED AND/OR AFFECTED PARTIES

FEBRUARY 2011–JUNE 2011

Stakeholders who contributed issues ranging across all sectors of society are recorded in this Comments and Response Report (C&RR). Full record of every issue raised is available from the public participation office and is also included in the Final Scoping Report (Appendix B.8). Similar issues raised have been grouped together. The name, affiliation and date of the commentator are also indicated. The issues raised by technical specialists and Douglas Travistock Joint Venture, the project proponent, are not included in this document.

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10.	Comments on the FSR	9

Abbreviations

BID	Background Information Document
CD	Compact Disk
C&RR	Comments and Response Report
DEA	Department of Environmental Affairs
DSR	Draft Scoping Report
DTJV	Douglas Tavistock Joint Venture
EIA	Environmental Impact Assessment
EIR	Environmental Impact Report
EMPR	Environmental Management Programme
FSR	Final Scoping Report
HIA	Heritage Impact Assessment
I&AP	Interested and/or Affected Party
MDEDET	Mpumalanga Department of Economic Development, Environment and Tourism
MPRDA	Minerals and Petroleum Resources Development Act
MWRP	Middelburg Water Reclamation Project
PM	Public Meeting
PP	Public Participation
RWQO	Receiving Water Quality Objectives

ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR THE DOUGLAS TAVISTOCK JOINT VENTURE'S PROPOSED MIDDELBURG WATER RECLAMATION PROJECT (MDEDET Ref No: 12/2/3/N28 and DEA Ref No: 12/9/11/L492/6)
Environmental Impact Assessment – Scoping Phase

Issue/Comment	Raised By	Response
1. Public Participation Related Comments / Issues		
Commented that she experience a problem getting through to Lindie Moore to obtain a copy of the FSR.	Ehlers, Liesel Samancor Chrome E-mail: 10 June 2011	Responded that the telephone number for Lindie Moore seems to be working, and an electronic copy of the Final Scoping Report (FSR) is also available on Jones & Wagener's website: http://jaws.co.za/ (link provided). Andrea Gibb, SiVEST (e-mail 14 June 2011)
Requested for the documents to be e-mailed.		Final Scoping Report was e-mailed, noting that Appendices A-N, as mentioned on page ix-x, are not included as they are too large to send via e-mail. Should these Appendices be required, it can be requested and an electronic copy (on CD) will be posted. Andrea Gibb, SiVEST (E-mail 14 June 2011)
Noted that consultation is very important and the project team should remain in contact with Naledi Village through the Union and the Councillor.	Mthimunye, Josiah NUM Representative, Middelburg Colliery PM: 12 March 2011	Request and Comment noted. Nicolene Venter: SiVEST
Questioned when the next meeting will be held.		The date of the next meeting will depend on how long the MDEDET and DEA will take to accept the FSR and approve the Plan of Study for the EIA. However the meeting will take place in the Impact Assessment Phase of the project which is anticipated to be towards the second half of 2011. Jacqui Hex: Jones and Wagner
Noted that he only received the CD containing an electronic copy of the DSR last week.	Pretorius, Koos Federation for a Sustainable Environment E-mail: 19 April 2011	The stakeholder's comment was submitted in response to the DSR review period reminder e-mail dated the 12 th of April 2011. It needs to be noted that upon written request (e-mail) dated 14 th of March from the stakeholder requesting a copy of the DSR, an electronic copy (CD) of the DSR was sent via registered mail to him on the 16 th of March 2011.
2. Water Related Comments/Issues		
Suggested that the compliance of water quality with the industrial effluent discharge limits (i.e. sulphates) should be investigated in	Moloto, Gillian Lapelle Northern Water	There is no such industrial effluent discharge limit for discharging water into a river. There are general limits for waste water plants

Issue/Comment	Raised By	Response
the EIA.	BID Registration and Comment Form: 19 April 2011	however this project will be investigated against the Receiving Water Quality Objectives (RWQO) for the Spookspruit which have more stringent limits.
Noted her concerns regarding water quality of the receiving water bodies (both upstream and downstream).		This will be assessed in the Impact Assessment Phase by various specialists. It is important to note that the purpose of this project is to improve the water quality downstream of the mine.
Suggested that the quality of groundwater be investigated in the EIA.	Nhlabathi, Aubrey Samancor Ghrome BID Registration and Comment Form: 16 February 2011	The potential impact on groundwater will be assessed during the impact phase.
3. Archaeological Related Comments/Issues		
Noted that where bedrock is to be affected, or where there are coastal sediments, or marine or river terraces and in potentially fossiliferous superficial deposits, the developer must ensure that a professional Palaeontological Desk Top study is undertaken to assess whether or not the development will impact upon palaeontological resources. If this is deemed unnecessary, a letter of recommendation for exemption from a professional Palaeontologist is needed. If the area is deemed sensitive a full Phase 1 Palaeontological Impact Assessment will be required and if necessary a Phase 2 rescue operation might be necessary.	Hine, Phillip South African Heritage Resources Agency (SAHRA) Letter: 10 May 2011	No bedrock is to be affected and therefore no paleontological study is required Jacqui Hex: Jones and Wagner
Noted that since no archaeological or any other heritage resources were identified, SAHRA APM Unit has no objections to the proposed development in terms of the archaeological component of the heritage resources.		Noted with thanks. Jacqui Hex: Jones and Wagner
If any evidence of archaeological sites or artefacts, or other heritage resources are found during construction activities, the SAHRA APM Unit (Mrs Nonofho Ndobochani, Phillip Hine, tel: 021 462 4502), must be alerted immediately, and a professional archaeologist / palaeontologist must be contacted as soon as possible to inspect the findings at the cost of the developer. If the		Noted. Jacqui Hex: Jones and Wagner

Issue/Comment	Raised By	Response
newly discovered heritage resources prove to be of archaeological / palaeontological significance, then a Phase 2 rescue operation might be necessary at the cost of the developer.		
4. Project Related Comments / Issues		
Questioned if DTJV has considered storing the waste materials in the old underground workings.	Ferreira, Dan Owner: Dan Ferreira Technical Services PM: 12 March 2011	Storing waste in old underground workings has been investigated; however there are a number of complications associated with it, such as legal requirements and the long term sustainability thereof. The option of storing waste materials in underground workings will not be included in the EIA; however the water treatment plant will operate for a very long time and this may be a long term possibility. Steve Brown: Project Director DTJV
Questioned when it is anticipated that the plant will start operating.	Grobler, Robert Director: Black Wattle PM: 12 March 2011	This will be clarified in the next phase of the EIA. Steve Brown: Project Director DTJV
Questioned why providing water to the eMalahleni Local Municipality has not been considered as an alternative to releasing the water back into the spruit.	Kleynhans, Jaco Owner: JKC PM: 12 March 2011	The initial requirement of the project is to manage the mine's surplus water; however there is nothing hindering the DTJV from negotiating some kind of arrangement in this regard in the future. Steve Brown: Project Director DTJV
Questioned what will happen to the water treatment plant after 20 years, in the event that BHP Billiton may leave South Africa.		The treatment of water can carry on for significantly longer than 20 years and the Joint Venture will fulfil the legal obligations going forward. Steve Brown: Project Director DTJV
Questioned when the construction phase of the project will commence.	Mthimunye, Josiah NUM Representative, Middelburg Colliery PM: 12 March 2011	It will depend on the EIA process, waste and water use licence as no construction can start until an Environmental Authorisation has been granted, the appeal process has come to an end and licenses have been received. If there are no delays, the EIA should be completed by January 2012 and the construction phase will commence in February/March 2012. Wendy Mey: Process Manager DTJV

Issue/Comment	Raised By	Response
Commented that they need to know the amount of financial provision (for the life cycle of the impact) for the treatment of the water and how it will be provided.	Pretorius, Koos Federation for a Sustainable Environment	This will be included in the combined EIR/EMPR amendment. It is stipulated in Regulation 51 (b) v of the MPRDA that financial provision in execution of the EMPR must be included in the EMPR.
Noted that financial provision must be done at different rates and these must include 0%, 1%, 2%, 4%, 6%, and 8% for periods of 25 years, 50 years, 100 years and 200 years. The method of provision (trust fund, bank guarantee, etc.) must also be discussed in detail as to why the method chosen is preferred.	E-mail: 19 April 2011	The requirements in terms of the MPRDA in terms of financial provision will be adhered to.
5. Technical Comments/Issues		
Questioned if there is any intention to use the plant to treat water from other sources.	Grobler, Robert Director: Black Wattle PM: 12 March 2011	The initial intention is only to treat water from Middelburg Mines. However, the opportunity to do this may be investigated in the future. Steve Brown: Project Director DTJV
Questioned if DTJV intends to pump water from the old mine, known as Vaalbank Colliery, which is located between Black Wattle and the northern boundary of Middelburg Mines. Black Wattle shares a boundary with this old mine and as a result they get water seepage into their workings. Although this mine is abandoned Middelburg Mines are still responsible for it.		The DTJV does not specifically intend to pump water from that area. They will examine all their mineral mining authorisations and take water from where they have to in order to comply with their legal requirements. Steve Brown: Project Director DTJV
Requested for the distance between the R575 and the proposed pipeline to be clarified where the R575 passes Naledi Village.	Mthimunye, Josiah NUM Representative, Middelburg Colliery PM: 12 March 2011	Responded that this will be determined and feedback provided in the draft minutes. Jacqui Hex: Jones and Wagner Post-meeting note: The MWR plant-Option 1 is proposed to be located adjacent to the R575. The proposed pipeline to the north of the proposed MWR plant is approximately 500 metres from Naledi Village entrance.
Commented that the application affects various existing Eskom Distribution, Sub Transmission and Eskom Transmission power lines and services. Eskom Distribution, in principle, has no	Pretorius, Annelien Eskom Distribution Letter: 22 February 2011	Correspondence acknowledged and forwarded to technical team for their attention.

Issue/Comment	Raised By	Response
<p>objection to the application provided that certain conditions are adhered to.</p> <p>Please refer to Appendix N for a copy of the detailed correspondence pertaining to the conditions.</p>		
6. Water Pipeline Routing Comments / Issues		
<p>The recommendation that Alternative 2 route alignment for the pipeline route be used is supported since this alignment is not envisaged to impact on any known heritage resources.</p>	<p>Hine, Phillip South African Heritage Resources Agency (SAHRA) Letter: 10 May 2011</p>	<p>Noted. None of the pipeline alternatives will impact on any known heritage resources. All environmental elements will be taken into consideration when assessing which alternative is preferred.</p> <p>Jacqui Hex: Jones and Wagner</p>
7. General Comments / Issues		
<p>Noted that Private Projects are following the Water Reclamation Project, Mpumalanga which is currently undergoing an EIA.</p>	<p>Andersen, Marlaine Senior Regional Content Researcher: Leads 2 Business E-mail: 10 June 2011</p>	<p>Requested her to register as an I&AP with SiVEST via the public participation process as this will allow her to be kept up to date throughout the EIA process.</p> <p>Jacqui Hex: Jones and Wagner (E-mail 13 June 2011)</p>
<p>Questioned what the current status of the EIA is and when it is expected to receive approval?</p>		<p>Responded that the Middelburg Water Reclamation Project is currently in scoping phase with the Final Scoping Report submitted for authorities review and approval and Environmental Authorisation will depend on the authorities' approval timeframe.</p> <p>Jacqui Hex: Jones and Wagner (E-mail 13 June 2011)</p>
<p>Noted that Black Wattle also needs to investigate the option of treating waste water but at a much smaller scale and it is their understanding that portable treatment plants are available. Requested whether the project can provide them with a list of companies that could be contacted.</p>	<p>Grobler, Robert Director: Black Wattle PM: 12 March 2011</p>	<p>A list will be provided of companies that can be contacted in this regard.</p> <p>Wendy Mey: Process Manager DTJV</p> <p>Post-meeting note: The following companies are recommended as potential suppliers of mobile water treatment facilities: Keyplan, Water Solutions South Africa (WSSA) and Veolia Water Solutions & Technologies South</p>

Issue/Comment	Raised By	Response
Commented that he supports the project proposed by DTJV. Middelburg has a lot of water in underground workings and hopes that this project will also treat this water in the future.		Africa. Comment noted. Nicolene Venter: SIVEST
Noted that they recently acquired the RSA rights for the Azud range of filters and water treatment equipment and said it would be appreciated if they could, at some stage, have a look at the reclamation challenge in order to assess if their products could be at all used in the solution.	Joubert, Danie General Manager: Klomac cc E-mail: 13 June 2011	Responded that e-mail has been forwarded to the project proponent and if he would like SIVEST will register him as an I&AP for the proposed project. Andrea Gibb, SIVEST (E-mail 17 June 2011)
Noted that he fully supports this proposed project and he will let people know about it.	Kleynhans, Jaco Owner: JKC PM: 12 March 2011	Comment noted. Nicolene Venter: SIVEST
Noted that the Union does not have any problems with the project and do not want to see the EIA process or project delayed.	Mthimunye, Josiah NUM Representative, Middelburg Colliery PM: 12 March 2011	Comment noted. Nicolene Venter: SIVEST
8. Communication		
Noted that decisions on Built Environment (e.g. Structures over 60 years) and Cultural Landscapes are not the function of this unit. Please refer to Mpumalanga Provincial Heritage Authority (Mr Benjamin Moduka bmoduka@mpg.gov.za) to whom the Impact Assessment Report and this Comment was sent.	Hine, Phillip South African Heritage Resources Agency (SAHRA) Letter: 10 May 2011	Noted with thanks, the documentation was forwarded to Mr Benjamin Moduka and he has been registered as an I&AP on the project. Jacqui Hex: Jones and Wagner
Requested to be registered as an I&AP for the proposed Middelburg Water Reclamation Project as a result of seeing the advertisement in the newspaper.	Moore, Fraser Telephone: 16 February 2011	Responded by confirming his registration as an I&AP and sending him the BID, Invitation Letter to participate in the EIA and PP process as well as the Registration and Comment Form. Andrea Gibb, SIVEST (E-mail 16 February 2011)
Noted the closing date for the commenting period of the draft to be 18/04/2011, and that she therefore eagerly awaits the final scoping report.	Moloto, Gillian Lapelle Northern Water BID Registration and Comment	Responded by confirming her registration as an I&AP and noting that her initial comments have been captured in the C&RR and will be forwarded to the project team for consideration.

ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR THE DOUGLAS TAVISTOCK JOINT VENTURE'S PROPOSED MIDDELBURG WATER RECLAMATION PROJECT (MDEDET Ref No: 12/2/3/N28 and DEA Ref No: 12/9/11/L492/6)

Environmental Impact Assessment – Scoping Phase

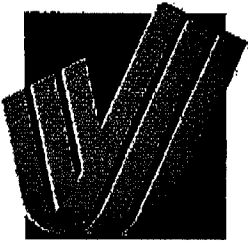

Issue/Comment	Raised By	Response
	Form: 19 April 2011	Andrea Gibb, SiVEST (E-mail 20 April 2011)
Noted that her colleague, Mr Phillip Hine has already commented on the HIA done by Cultmatrix and in future it would be best to send all impact assessments and related correspondence for projects in Mpumalanga and Limpopo to him as she deals exclusively with the North West Province.	Scheermeyer, Colette Assistant Archaeologist: South African Heritage Resources Agency (SAHRA) E-mail: 14 June 2011	Confirmed that SiVEST did receive Mr Hines's comments and that her name will only be linked to EIAs/BAs in the North West Province and Phillip Hine to Mpumalanga and Limpopo Provinces. Nicolene Venter, SiVEST (E-mail 17 June 2011)
Queried how she can register as an I&AP for the proposed Middelburg Water Reclamation Project, as a result of seeing the advertisement in the newspaper.	Viljoen, Michelle Sales and Marketing: ITT Water & Wastewater South Africa (Pty) Ltd Telephone: 23 February 2011	Suggested that she send an e-mail with all her contact details to be entered into the project database, thereafter she would receive a registration confirmation and BID. Andrea Gibb, SiVEST (Telephone 23 February 2011) Upon receipt of her e-mail responded by confirming that she has been registered as an I&AP and forwarded the BID, Invitation Letter to participate in the EIA and PP process as well as the Registration and Comment Form. Andrea Gibb, SiVEST (E-mail 24 February 2011)
9. Comments on the DSP		
Noted that the draft Scoping Report for this project has been reviewed by the Steve Tshwete Local Municipality. In general, the municipality is satisfied with the content of the scoping report particularly regarding the issues that have been identified, specialist studies to be conducted and involvement of all the relevant interested and affected parties. Enquiries may be directed to M.M. Mahamba.	Fouchè, WD Municipal Manager: Steve Tshwete Local Municipality Letter: 04 May 2011	Comment noted. Nicolene Venter: SiVEST
Noted that Figure 3 of the MWRP EIA document indicates Hartbeesloop as the Sprookspruit.	Hodgson, Frank E-mail: 03 April 2011	Thank you for this comment. This has been amended.
10. Comments on the FSR		
Noted that their main concern is basically to ensure that sufficient provision is made for the life cycle of the impact in order to ensure that society will not have to pay in the future for the impacts caused	Pretorius, Koos Federation for a Sustainable Environment: Mpumalanga	Noted with thanks. A Financial Provision chapter has been included in the Draft Environmental Impact Report for public review.

Issue/Comment	Raised By	Response
<p>by the mines. It is therefore necessary to also calculate the financial provision without any income generated from the project. If sufficient provision is not catered for, then our grandchildren are going to be paying for the impacts of coal mines, not having even utilised any coal as an energy source. The sins of the fathers will be born by the children.</p>	<p>E-mail: 14 June 2011</p>	<p>Jacqui Hex: Jones and Wagner</p>
<p>Noted that the discount rate to be applied is of cardinal importance as the higher the discount rate, the less the financial provision. It must be borne in mind that this is not a profit centre, but basically an expense of the mine in order to mitigate its impacts. If, in future, the cost of water rises above the cost of treatment, then the project will change. To assume that money will be made is, in his opinion, not relevant at this stage. The rate should thus reflect a stable, low risk rate of return, if any at all.</p>		<p>The MWR Project will discharge all treated water into the receiving environment. In the event of the operating model changing in the future, this will be considered.</p> <p>Lindie Moore: MWR Project, DTJV</p>
<p>Noted that the format of provision is important and in terms of the MPRDA requirements, <i>“financial provision” means the insurance, bank guarantee, trust fund or cash that applicants for or holders of a right or permit must provide in terms of sections 41 and 89 guaranteeing the availability of sufficient funds to undertake the agreed work programmes and to rehabilitate the prospecting, mining, reconnaissance, exploration or production areas, as the case may be;</i></p> <p><i>41(3) The holder of a prospecting right, mining right or mining permit must annually assess his or her environmental liability and increase his or her financial provision to the satisfaction of the Minister.</i></p> <p><i>41(4) If the Minister is not satisfied with the assessment and financial provision contemplated in this section, the Minister may appoint an independent assessor to conduct the assessment and determine the financial provision.</i></p> <p><i>89. In addition to section 5(4), no exploration operation or</i></p>		<p>Noted with thanks. All legislative requirements have been adhered to in drafting of reports.</p> <p>Jacqui Hex: Jones and Wagner</p>

Issue/Comment	Raised By	Response
<p><i>production operation may commence unless the holder of the rights concerned has provided for a financial provision acceptable to the designated agency guaranteeing the availability of sufficient funds for the due fulfilment of all exploration and production work programmes by the holder.</i></p>		
<p>Commented that taking a risk averse and precautionous approach is of extreme importance and speaks to, inert alia, two issues. At all times a risk averse and cautious approach has to be maintained when returns are planned and managed for – especially when higher risk and return options are evaluated. The time frames of these funds will have to extend into at least hundreds of years. An appropriate discount rate has to be used that reflects the fact that this is not a high risk high return business venture, but rather a necessary expense where the income generated will have to last many hundreds of years. Conservative management practises must be employed and this will lead to conservative income being generated.</p>		<p>Noted. This will be taken into consideration.</p> <p>Lindie Moore: MWR Project, DTJV</p>
<p>In view of the above we request that discount rates of 0%, 1%, 2% and 4% is also calculated and that the calculations model be made available for us to assess it.</p>		<p>Noted. Closure cost assessments and financial provisions will be done in accordance to legislative and authorities requirements.</p> <p>Lindie Moore: MWR Project, DTJV</p>
<p>Noted that in terms of the type of fund and provision established the MPRDA speaks of three possibilities which will have to be analysed in terms of their weaknesses and strengths, taking into account the time period that the finical provision has to last.</p> <ol style="list-style-type: none"> 1) <u>Insurance</u> – Noted that he has never come across this one and thinks that it speaks volumes for the risk involved that no insurance company is prepared to venture into this huge potential field of activity. 2) <u>Bank Guarantee</u> – This is seen less and less and mostly from small companies and over short periods of time (Life 		<p>Noted with thanks. All legislative requirements have been adhered to in drafting of reports.</p> <p>Jacqui Hex: Jones and Wagner</p>

Issue/Comment	Raised By	Response
<p>cycle of the mine) One of our main concerns here is that the bank guarantee is only a guarantee to pay if funds are available.</p> <p>3) <u>Trust fund</u> – At issue here is who is the gate keeper? What are the set of criteria that regulates the trading and managing of these funds? What are the requirements of these fund managers? We have never delved into these since we have never had any experts to back us up, but I think it is high time we resolve these issues – especially light of the impacts and the period of time that the funding will have to make provision for.</p>		
<p>Noted that the expected life cycle of the impacts is of critical importance and becomes even more critical the lower the discount rate that is being used. Input from geochemist and geo hydrologists will be needed to calculate the rate of pyrite being oxidised and from that the amount of time the reactions will continue to happen.</p>		<p>Noted. A Geochemical, Subsurface Flow study and Groundwater assessments were all done for the project.</p> <p>Lindie Moore: MWR Project, DTJV</p>
<p>Noted that Prof Hodgson did calculations and predictions on 10 mines in the Witbank area in his report on rainfall balance pre and post mining. There has, however, never been a study to validate the figures.</p> <p>Please refer to Appendix B.4 for a copy of the document referred to.</p>		<p>The MWR Team has done an extensive study in terms of the water balance and recharge rates on Middelburg Mines to determine the volumes of water that confirmed the basis of design. A combination of Prof Hodgson's work, the use of GoldSim software, monitoring and measurement on site, calibration exercises and range analyses were all considered and incorporated.</p>
<p>Commented that they have a big problem with how the water balance of the rainfall pre and post mining is calculated, as it does not conform to Hodgson's figures, and a lot of rainfall water will simply be lost in the system if Hodgson's figures are used. This must be discussed at length and finality on the figures must be reached in order to make provision for the right amount of AMD to be treated.</p>		<p>Lindie Moore: MWR Project, DTJV</p>

B.9 Comments from Stakeholders

	<p>ENVIRONMENTAL IMPACT ASSESSMENT FOR THE DOUGLAS TAVISTOCK JOINT VENTURE'S (DTJV) PROPOSED MIDDELBURG WATER RECLAMATION PROJECT (MWRP), MIDDELBURG, MPUMALANGA PROVINCE</p> <p>(MDEDET Ref No: 17/2/3/N28 and DEA Ref No: 12/9/11/L492/6)</p> <p>REGISTRATION AND COMMENT FORM Accompanying Background Information Document February 2011</p>	<p>Public Participation Office</p>  <p>Nicolene Venter/Andrea Gibb SIVEST Environmental PO Box 2921, RIVONIA, 2128 Tel (011) 798 0600 Fax (011) 803 7272 Email andrea@sivest.co.za</p>
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Please complete and return by post, fax or e-mail to the Public Participation Office (as above) by **FRIDAY 11 MARCH 2011**

TITLE	Mr.	FIRST NAME	Aubrey
INITIALS	M.A	SURNAME	Nhlabatshi
ORGANISATION	Samancor Chrome		
POSTAL ADDRESS	Private Bag x 251846, Middelburg		
		POSTAL CODE	1050
TELEPHONE	(013) 249 4699	FAX NO	(013) 249 4408
CELL PHONE NO	0725476779		
E-MAIL ADDRESS	aubrey.nhlabatshi2@samancorcr.com		

REGISTRATION AS INTERESTED AND AFFECTED PARTY (I&AP) (please circle applicable box)

Please formally register me as an interested and affected party (I&AP) so that I may receive further information and notifications during the EIA process	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
I would like my notifications by* *Please tick the appropriate box	Letter (mail) <input checked="" type="checkbox"/>	
	E-mail <input checked="" type="checkbox"/>	
	Fax <input type="checkbox"/>	
	Telephone (Telkom / Cellular) <input type="checkbox"/>	
I would like to receive documents for comment as follows* * Please tick the appropriate box	Paper copies <input type="checkbox"/>	
	By e-mail <input checked="" type="checkbox"/>	
	On CD <input checked="" type="checkbox"/>	
In terms of GNR 543 (Regulation 56 (1)(c)) (EIA process regulations) I disclose below any direct business, financial, personal or other interest that I may have in the granting or rejection of the application for environmental authorisation:		

COMMENTS (please use separate sheets if you wish)

I suggest that the following issues of concern be investigated in the EIA:
Quality of water (ground)

I suggest the following for the EIA process and / or the public participation process:

Please contact the following colleagues/friends to register as I&APs for this EIA (name and contact details e.g. e-mail address):


Signature

THANK YOU FOR YOUR CONTRIBUTION

16 Feb 2011
Date

Ms Nicolene Venter
Sivest Environmental Division
PO Box 2921
RIVONIA
2128

Date:
22 February 2011

Enquiries:
Annelien Pretorius
Tel: 012 421 3048
Fax: 012 421 4793
Email: PretoANN@eskom.co.za

Dear Ms Venter

**EIA FOR THE DOUGLAS TAVISTOCK JOINT VENTURE'S PROPOSED MIDDELBURG
WATER RECLAMATION PROJECT**

Eskom Ref: SO/305/11

Your Ref: 9529 MWRP EIA

We refer to your notice and invitation to participate in the EIA process dated 11 February 2011.

This application affects various existing Eskom Distribution, Sub Transmission and Eskom Transmission power lines and services. The approximate positions of these powerlines are indicated on the attached sketch.

Eskom Distribution has in principle no objection to the above mentioned application provided the following conditions are adhered to:-

1. There is a 9 metres, 11 metres and 18 metres building and tree restriction either side of the centre lines of the 11kV and 22kV, 88kV and 132kV powerlines, which must be adhered to in all future development and or construction.
2. Eskom (Land Development) should receive an application for construction near their services from Jones and Wagner Consulting Engineers, with the final approved route, upon which this office will then comment accordingly.
3. Eskom can not guarantee the exact position of the underground electrical cables and therefore the applicant's site representatives must expose the cables by hand, in order to establish their location. Eskom's cables must be placed in sleeves encased in concrete across the width of the servitude, at the applicant's expense where frequent excavations occur in the cable area.
4. Eskom Distribution's services and equipment must be acknowledged at all times and may not be tampered or interfered with. It is important to acknowledge and respect Eskom's Distributions services at all times. It will be required of the developer to familiarise him/her self with all safety hazards related to electrical plant.
5. Eskom's consent will not relieve the applicant from obtaining the necessary statutory, land owner or municipal approvals.

**Northern Region
Network Services
Goble Street Extension 1 Newlands 0049 PO Box 36099 Menlo Park 0102 SA
Tel +27 12 421 3150 Fax +27 12 421 3330 www.eskom.co.za**

**Directors: PM Makwans (Chairman) BA Dames (Chief Executive) LCZ Cele SD Dube BL Fanaroff LG Josefsson (Swedish)
HB Lee (Korean) WE Lucas-Bull B Mhlohlakulu J Mirange (Rwandan) JRD Modise
PS O'Flaherty U Zikalala (Executive Director) Company Secretary: B Mbomvu
Eskom Holdings Limited Reg No 2002/015827/06**

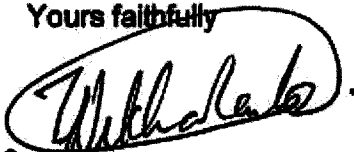


6. Natural ground level must be maintained within Eskom Distribution reserve area and servitudes.
7. Eskom Distribution shall at all times retain unobstructed access to and egress from its services.
8. Eskom Distribution shall not be liable for the death of or injury to any person or for the loss of or damage to any property whether as a result of the encroachment or of the use of the area where Eskom Distribution has its services, by the applicant, his/her agent, contractors, employees, successors in title and assigns.
9. The applicant indemnifies Eskom against loss, claims or damages including claims pertaining to interference with Eskom Distribution services or apparatus or otherwise. The applicant's attention is drawn to section 27(3) of the Electricity Act 1987, as amended in 1994, which stipulates that the applicant can be fined and/or imprisoned as a result of damage to Eskom's apparatus.
10. No construction work may be executed closer than nine metres from any of Eskom's structures or the middle of the power line servitude and no squatting to be allowed in the servitude area.
11. No tree shall be planted within the servitude area or be allowed to grow to a height in excess of the horizontal distance of that tree from the nearest conductor of any power line or to grow in such a manner as to endanger that line should it fall or be cut down.
12. The effective management and handling of waste is of crucial importance. No dumping shall be allowed within Eskom Distribution Servitudes. All unwanted waste (gaseous, liquid or solids) should be disposed of at a registered waste disposal site as stipulated under Section 20 of the Environmental Conservation Act (Act 73 of 1989).
13. Any relocation of Eskom's services, due to this development, will be for the account of the Developer. The Developer / Applicant will also be responsible for granting Eskom an alternative route for the power line. Regarding any power line deviation, please contact Eskom Customer Contact Centre; 08600 37566 in connection with cost.

This letter doesn't serve as any guarantee that capacity will be available for any proposed development. The Eskom Customer Contact Centre 08600 37566 should be contacted in connection with electricity supply enquiries.

This application should also be sent to: Eskom Transmission, Property Rights Assets Management's office in Megawatt Park in respect of the Eskom Transmission substation and power lines involved for attention: Lungile Motsisi (D1241) MotsisiL@eskom.co.za, Transmission Lands & Rights, Eskom Megawatt Park, PO Box 1091, Johannesburg 2000 for their final comments.

Yours faithfully



L Human
LAND DEVELOPMENT MANAGER



Execution Excellence
A DIMENSION DATA COMPANY

Technology and Network Services
Private bag X122
Halfway house
1685
Tel: (011) 655-1796
Fax: (011) 576-2806
Enquiries: Yolanda van Staden
Our reference: VOD 2397
2011-02-28

ESKOM HEAD OFFICE
P.O. Box 8610
MENLO PARK
0120

Attention: Ms. Annelien Pretorius.

Notice of Intention to Construct New Telecommunications Infrastructure: N1, SPRUIT.
Trench and lay optic fiber cable 2*7.12/10mm and 2*50/42mm silica ducts for DFA from existing handhole in Van der Merwe St to Vodacom Site 2397. All crossings will be drilled except in the case of congested services. Trenching pilot holes will be dug to locate the position of other services. Where possible trench will be 450 wide and 1m deep dependent on other services. All work will be in the road reserve 1m from the boundary, again dependent on other services. All work supervised by Civils P.H. Baskin.

Without prejudice to the provisions set out in the Telecommunications Act 36 of 2005 and Electronic Telecoms act section 22, Plessey intends to undertake the above mentioned work and thereafter maintain its Network as illustrated on the enclosed prints of drawing No: VOD2397.

Will you kindly indicate on the prints, the location of any existing services, which may be encountered during operations as well as any new development being planned in the area and return 1 print signed and stamped. It would be appreciated if a detailed location plan of any existing infrastructure or building that may be affected be provided to this office.

To enable Plessey to meet its commitments, it would be appreciated if your reply could be forthcoming by 2011/03/09. It will be accepted that no reticulation, building or any other structure is affected and that construction work will commence if no reply has been received by the aforementioned date. We realise that your department is also busy but your help in this regard would be appreciated.

Please do not hesitate to contact the Wayleave office if you have any queries concerning the above.

Yolanda.vanstaden@plessey.co.za

Amelien Pretorius
Land Development
Tel: 012 421 3046 Fax: 012 421 4793
email: ppretorius@eskom.co.za

ESKOM
NOT AFFECTED
Signature: [Handwritten Signature]
Date: 13/3/2011



Royal Palm Business Estate / Cyr R101 and Sudds Road / Midrand / Private Bag X122 / Halfway House 1685 / South Africa
Tel: +27 (0)11 655 1700 Fax: +27 (0)11 655 1670 www.plessey.co.za

Plessey (Pty) Ltd A Dimension Data Company Reg. No. 199200317407
DIRECTORS: L Nyongiso (Chairman), A. Oswald, B. Doyke, H. Emery, Z. Fupke, Z. Mbele.

Att: Yolanda van Staden.

Chantelle Gray 086 608 9452



Fibrenet Infrastructure PTY (Ltd) P.O. Box 373
Reg. Nr. 2009/006808/07 Walkerville
Vat. Nr. 4520251127 1876

Tel: +27 (0)11 948 8891/2
Fax: +27 (0)11 948 8890
086 608 9452

Email: info@fni.co.za
www.fni.co.za



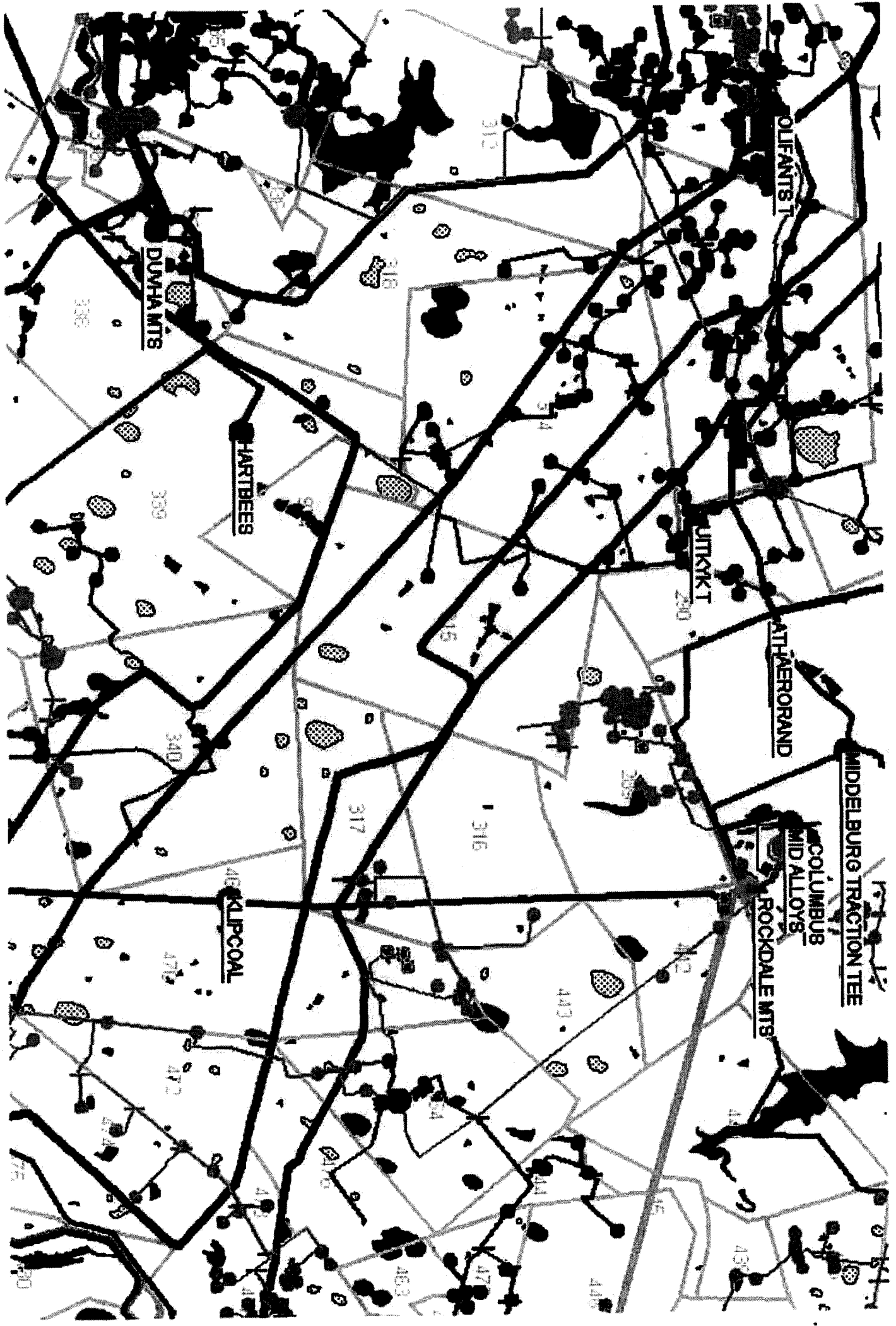
DATE: 07/02/2011

FROM: FNI (Pty) Ltd
TO: ESKOM
ATTENTION: ANNELINE PRETORIUS
AREA: LENCHEN AVE, CENTURION
REFERENCE NUMBER: VCW000230

NOT AFFECTED	
Signature	Date

1. FNI is submitting Way Leave Applications for telecommunication services throughout the country.
2. These services are extremely urgent as our planned provision of telecommunication services to our customers are dependant thereon. Please note that FNI is appointed by Vodacom SA to install telecommunication services (fibre optic ducting).
3. Civil Construction to take place at: **Aletta street, Centurion**
4. **Estimated Construction Start Date: 21/02/2011**
Estimated Construction Completion Date: 21/05/2011
5. Trenching will be done by hand or mechanical trencher. The method of trenching will depend on soil conditions and existing services. Way Leave and Client Specification will be adhered to at all times. The trench will under normal conditions not exceed 1000mm depth. Pre Cast Concrete Hand Holes will also be place in the ground again according to specification and this depth will be 900mm under normal conditions.
6. It is therefore of utmost importance, that the location and depth of your services within these road reserves are indicated on the drawings. Our Trench depth will not be more than 1m on average.
7. Please also find included a list of construction drawings, detailing the following:
 - a. Existing Services
 - b. Route
 - c. Construction Methods
 - d. Handhole/Manhole positions
 - e. Layout Plans/Drawings
8. If your services are affected by this proposal, please indicate your services and your company's conditions on two of the three drawings attached.
9. If your services are not affected by this proposal, please acknowledge and sign the attached copy. Your official stamp must accompany all replies.

Annelien Pretorius Land Development Tel: 012 421 3048; Fax: 012 421 4793 email: pretoann@eskom.co.za



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COLUMBUS
MID ALLOYS

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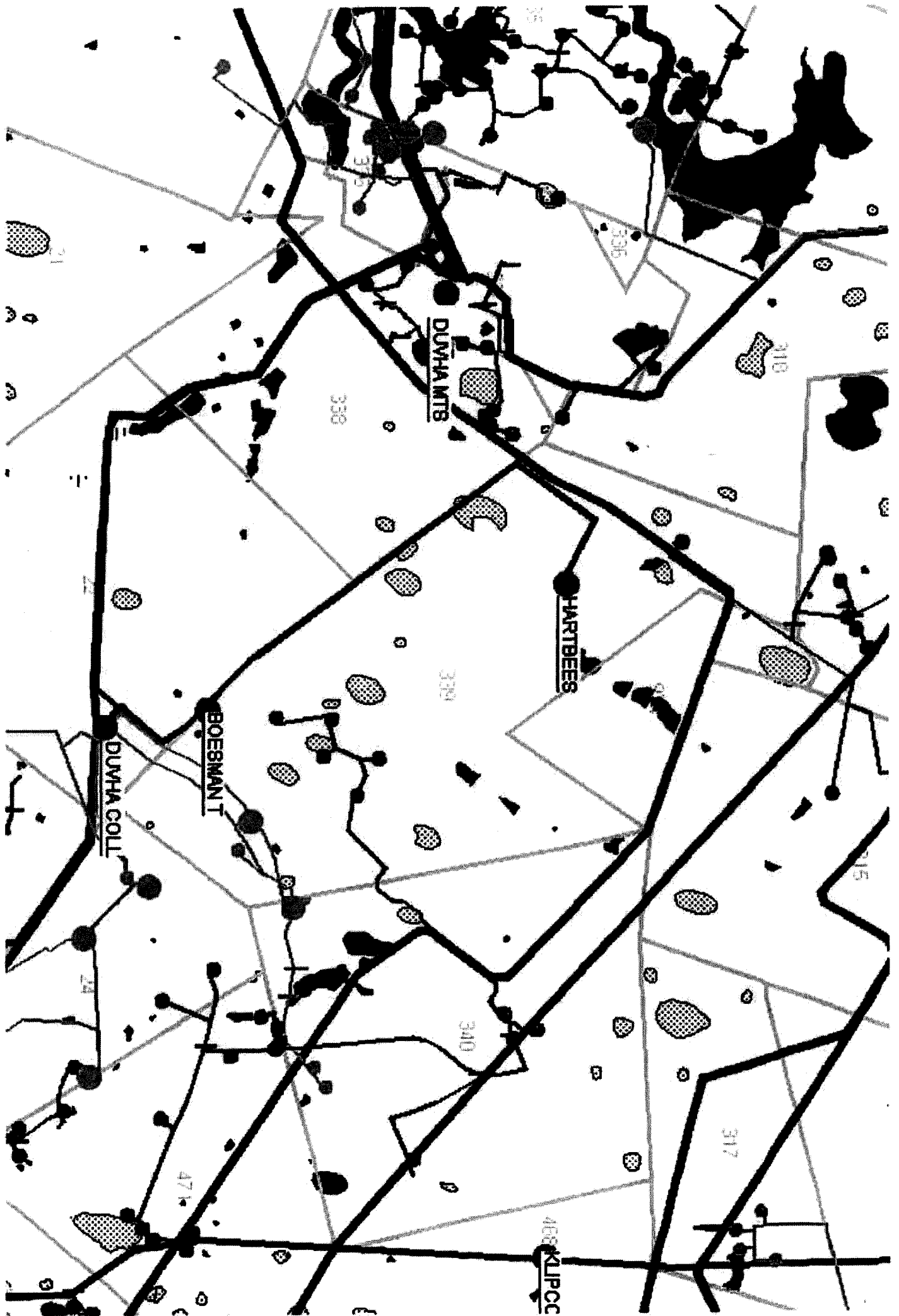
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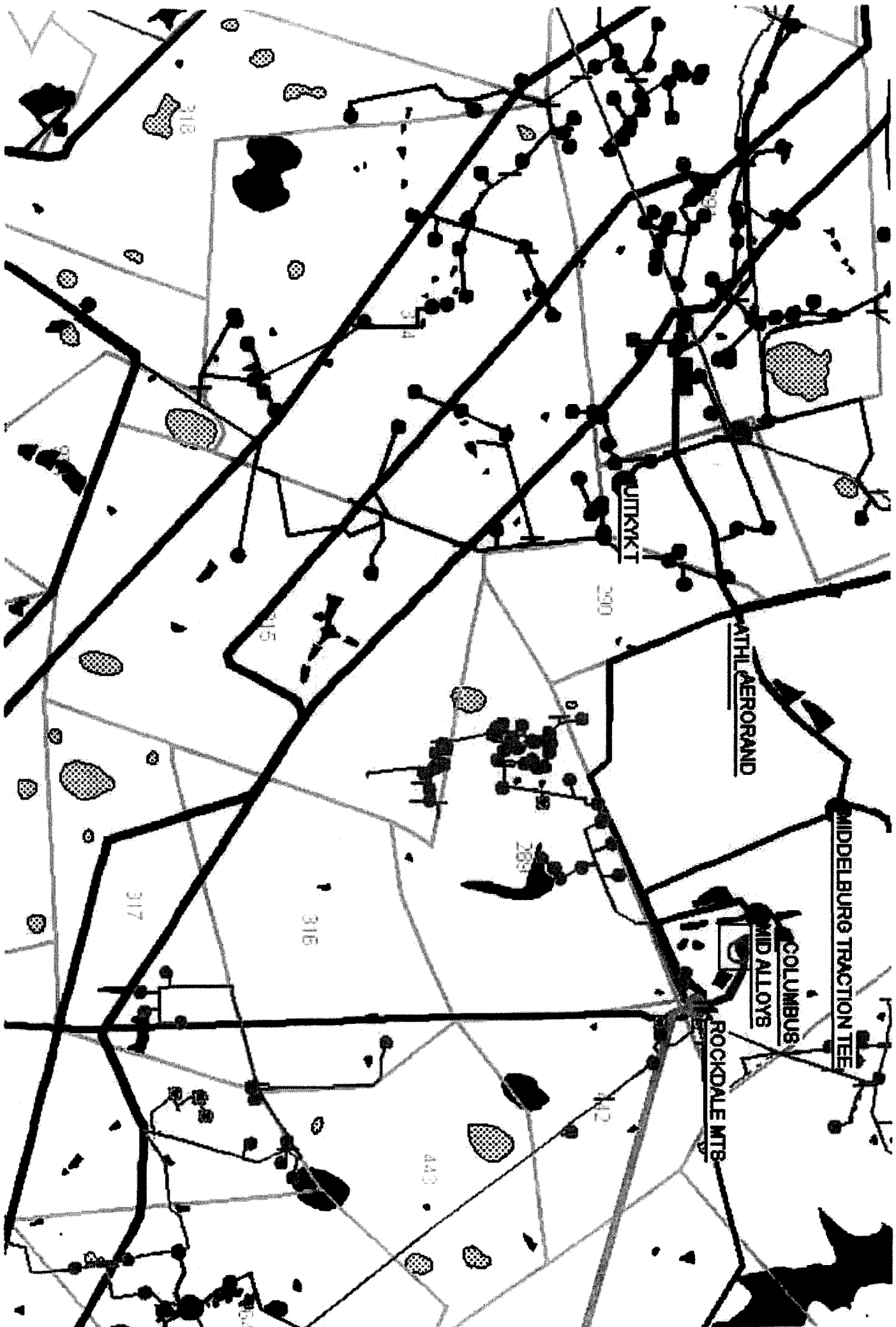
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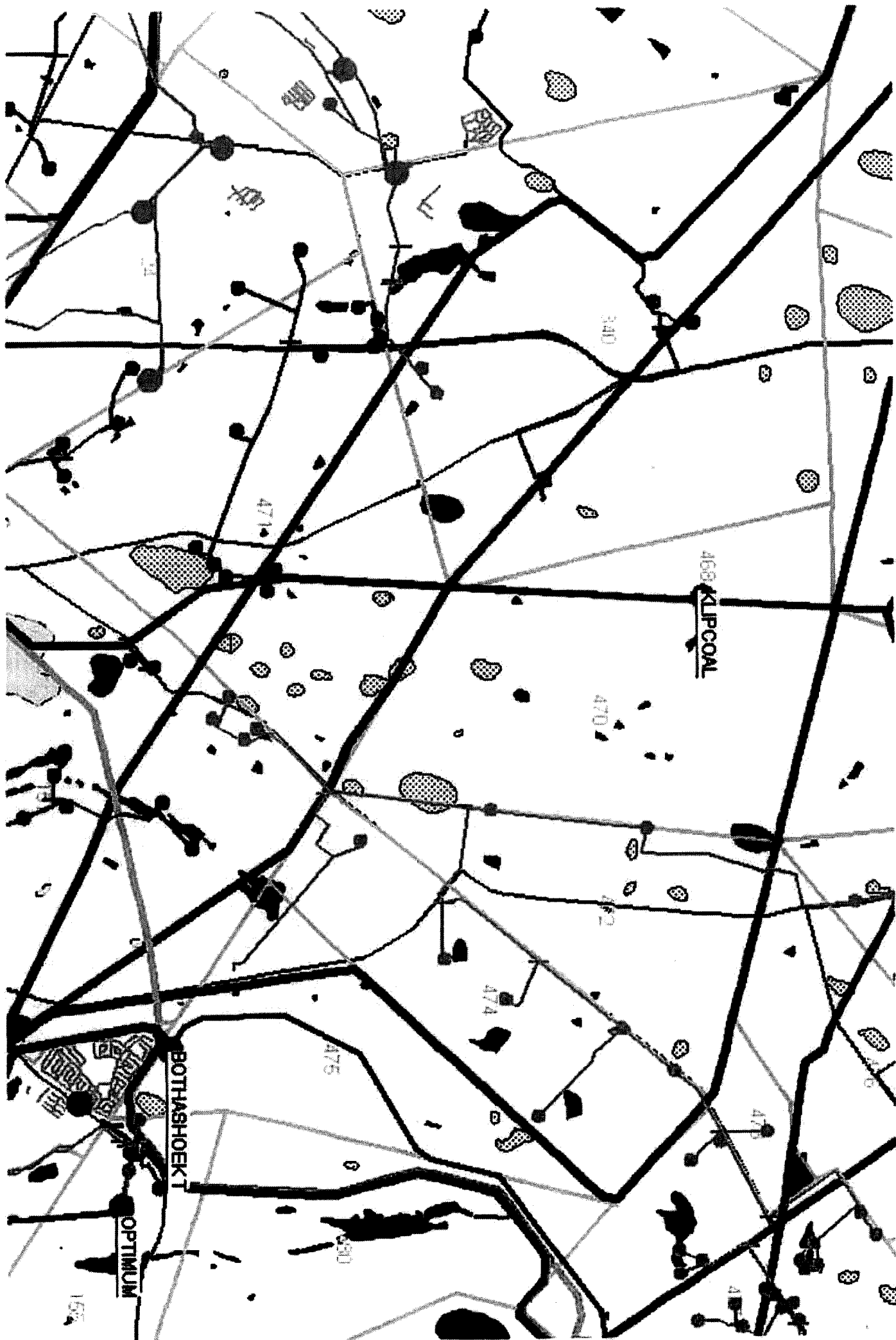
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Cc: vanzyl@jaws.co.za; 'Vanessa Viljoen'

Subject: MWRP: Olifants River Forum - Distribution of PM Invitation & DSR Notification

Importance: High

Dear Jacqui,

Please see Marainna's e-mail below – proof that the Members did distribute the information between them.

Kind regards

Nicolene

From: Marianna Nieuwoudt [mailto:matrixpr@ananzi.co.za]

Sent: Tuesday, March 08, 2011 12:57 PM

To: Nicolene Venter

Subject: FW: DTJV Proposed MWR Project: Invitation to Public Meeting & Notificatin of Availability of Draft Scoping Report

Importance: High

Net ter bewys van die members het aangestuur.

Groete

Marianna Nieuwoudt

Matrix PR & Communications Consultants


P O Box 2189, Secunda 2302

Tel: 017-634 7208

Fax: 088 017-634 7208

Cell: 082 459 1021

Email: matrixpr@ananzi.co.za

 please don't print this e-mail unless you really need to.

From: Retha Gerber [mailto:GerberME@tut.ac.za]

Sent: 08 March 2011 10:52 AM

To: Ray Jansen; Catherine Coni; Mlindelwa Lupankwa; Jonathan Okonkwo

Cc: matrixpr@ananzi.co.za

Subject: DTJV Proposed MWR Project: Invitation to Public Meeting & Notificatin of Availability of Draft Scoping Report

Importance: High

FYI

Retha Gerber


Departmental Administrator


Tshwane University of Technology

Department of Environmental, Water & Earth Sciences

Building 4-504

Arcadia Campus

 **Phone:** (012) 382-6232 / 6115

 **Fax:** (012) 382-6354

 **E-mail:** gerberme@tut.ac.za

website: www.tut.ac.za



From: Marianna Nieuwoudt [mailto:matrixpr@ananzi.co.za]

Sent: 08 March 2011 09:24 AM

To: 'Arie Oberholzer - Schoeman Boerdery'; 'Barbara van Koppen(Dr) - IWMI'; 'Brent Parrott - Schoeman Farms'; Carl Schmahl; 'Dirk Ferreira - Loskop Irrigation Board'; 'Elaine Tribe'; 'Hilmy Sally (Dr) - IWMI'; 'Jaco Burger - Olifantsbesproeiingsraad'; 'Johan van Stryp - Loskop Besproeiingsraad'; 'Kallie Schoeman - Olifantsbersproeiingsraad'; Karen Chetty - Lonmin Environmental Centre; 'Marcus Selepe - Inkomati CMA'; 'Ossie Rossouw - Lebalelo Water User Association'; Retha Gerber

Subject: FW: DTJV Proposed MWR Project: Invitation to Public Meeting & Notificatin of Availability of Draft Scoping Report

Importance: High

From: Nicolene Venter [mailto:NicoleneV@sivest.co.za]

Sent: 27 February 2011 07:10 PM

To: matrixpr@ananzi.co.za

Subject: DTJV Proposed MWR Project: Invitation to Public Meeting & Notificatin of Availability of Draft Scoping Report

Importance: High

Dear Interested and/or Affected Party

As part of the Environmental Impact Assessment (EIA) process and the Public Participation process for the above-mentioned proposed project, SIVEST Environmental would like to cordially invite you to attend the Public Meeting to be held on Saturday, 12 March 2011 at the BusMid Auditorium, Walter Sisulu Street (Church Street), Middelburg. Please find attached your invitation to the Public Meeting.

The attached letter also notifies you of the availability of the Draft Scoping Report (DSR) for public review as from Tuesday, 15 March 2011 to Tuesday, 19 April 2011.

If you require any additional information, we kindly request that you submit your request – in writing – to us.

Kind regards

Geagte Belangstellende en/of Geaffekteerde Party

As deel van die Omgewingsimpakstudieproses en die Openbare Deelnameproses (EIA) vir die bogenoemde voorgestelde projek, noui SIVEST Environmental u graag vriendelik uit om die Openbare Vergadering by te woon wat sal plaasvind op Saterdag, 12 Maart 2011 by die BusMid Ouditorium, Walter Sisulustraat (Kerkstraat), Middelburg. Vind asseblief aangeheg u uitnodiging na die Publieke Vergadering.

Die aangehegde uitnodiging sluit ook die kennisgewing in van die beskikbaarheid van die Konsep Bestekopnameverslag (DSR) vir openbare besigtiging vanaf Dinsdag, 15 Maart 2011 tot Dinsdag, 19 April 2011.

Indien u enige addisionele inligting verlang, versoek ons u vriendelik om u versoek skriftelik aan ons te stuur.

Vriendelike groete

NICOLENE VENTER
Snr Public Participation Practitioner

SIVEST Environmental Division

tel (direct) +27 11 798 0635 tel (general) +27 11798 0600 fax +27 11 803 7272 cell 083 377 9112
email nicolenev@sivest.co.za website www.sivest.co.za

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Tshwane University of Technology

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or obtained by phoning (012) 382-5911

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Version: 8.5.449 / Virus Database: 271.1.1/3489 - Release Date: 03/07/11 20:43:00

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Version: 8.5.449 / Virus Database: 271.1.1/3489 - Release Date: 03/07/11 20:43:00

Andrea Gibb

From: Matjelele Phaladi [MPhaladi@environment.gov.za]
Sent: Monday, March 14, 2011 8:28 AM
To: Joanne Turner
Cc: Andrea Gibb
Subject: Re: EIA: DTJV Middelburg Water Reclamation Project - Public Meeting Reminder

The Department noted invitation for public meeting and decision would be made by the Department once Final Scoping and EIAR are submitted.

>>> Joanne Turner <JoanneT@sivest.co.za> 3/11/2011 1:43 PM >>>

Dear I&AP

This e-mail serves as a reminder of the DTJV Middelburg Water Reclamation Project Public Meeting to be held on Saturday 12th March 2011, starting at 10h00 at the BusMid Auditorium, Walter Sisulu Street (previously Church Street) (next to the DROS), Middelburg.

For easy reference we've attached a copy of the invitation letter, map and registration form.

Kind Regards

Joanne Turner

Project Secretary / PP Administrator

SIVEST Environmental Division

direct +27 11 798 0639 **tel** +27 11 798 0600 **fax** +27 11 803 7272 **cell** +27 790 142 551

email joannet@sivest.co.za **website** www.sivest.co.za

****NOTE:** Departement name change from** ****DEAT.gov.za to Environment.gov.za**** This message and any attachments transmitted with it are intended solely for the addressee(s) and may be legally privileged and/or confidential. If you have received this message in error please destroy it and notify the sender. Any unauthorized usage, disclosure, alteration or dissemination is prohibited. The Department of Environmental Affairs accepts no responsibility for any loss whether it be direct, indirect or consequential, arising from information made available and actions resulting there from. The views and opinions expressed in this e-mail message may not necessarily be those of Management.

Andrea Gibb

From: Joanne Turner
Sent: Monday, March 14, 2011 7:05 AM
To: Nicolene Venter; Andrea Gibb
Subject: FW: DTJV Middelburg Water Reclamation Project - Public Meeting Reminder

Follow Up Flag: Follow up
Due By: Tuesday, March 15, 2011 8:00 AM
Flag Status: Completed

FYI

Joanne Turner

Project Secretary / PP Administrator
SiVEST Environmental Division

direct +27 11 798 0639 **tel** +27 11 798 0600 **fax** +27 11 803 7272
email joannet@sivest.co.za **website** www.sivest.co.za

Consulting Engineers • Project Managers • Environmental Consultants • Town and Regional Planners
Durban • Johannesburg • Pietermaritzburg • Richards Bay • Ladysmith • Cape Town • Harare (Zimbabwe)

From: Koos Pretorius [mailto:d.zoekop@lando.co.za]
Sent: 11 March 2011 09:11 PM
To: 'Mariette Liefferink'; Joanne Turner
Subject: RE: DTJV Middelburg Water Reclamation Project - Public Meeting Reminder

Joanne,

Please register the FSE as an IAP.

I cannot attend the meeting on such a short notice.

Please send me a copy of the draft scoping to

Koos Pretorius
Box 201
Belfast
1100

Koos Pretorius

From: Mariette Liefferink [mailto:mariettel@iburst.co.za]
Sent: 11 March 2011 06:06 PM
To: 'Koos Pretorius'
Subject: FW: DTJV Middelburg Water Reclamation Project - Public Meeting Reminder
Importance: High

Van belang, Koos?

From: Joanne Turner [mailto:JoanneT@sivest.co.za]
Sent: Friday, March 11, 2011 1:43 PM
Cc: Nicolene Venter; Andrea Gibb; Vanessa Viljoen

Subject: EIA: DTJV Middelburg Water Reclamation Project - Public Meeting Reminder

Importance: High

Dear I&AP

This e-mail serves as a reminder of the DTJV Middelburg Water Reclamation Project Public Meeting to be held on Saturday 12th March 2011, starting at 10h00 at the BusMid Auditorium, Walter Sisulu Street (previously Church Street) (next to the DROS), Middelburg.

For easy reference we've attached a copy of the invitation letter, map and registration form.

Kind Regards

Joanne Turner
Project Secretary / PP Administrator
SiVEST Environmental Division

direct +27 11 798 0639 **tel** +27 11 798 0600 **fax** +27 11 803 7272 **cell** +27 790 142 551
email joannet@sivest.co.za **website** www.sivest.co.za

Andrea Gibb

From: Frank Hodgson [hodgson.frank@gmail.com]
Sent: Sunday, April 03, 2011 3:03 PM
To: Mey, Wendy (BSA - Energy Coal); Moore, Lindie (BECSA CMP); Koen, Mike (BECSA CMP); Bloy, Steven (BECSA MMS); Lee, Clinton (BECSA KPS)
Cc: Botha, Lyness (BECSA CMP); Repinga, Ralph (BECSA MMS); vanzyl@jaws.co.za; Andrea Gibb
Subject: Spookspruit

Dear Sir

I notice in your Figure 3 of the MWR Project EIA document that you indicate the Hartbeesloop as the Spookspruit.

I thought I would just let you know .

Regards

Frank Hodgson
P.O. Box 13360, Noordstad 9302 South Africa
Cell ++27 82 4409454 Fax 086 654 9545



**ENVIRONMENTAL IMPACT ASSESSMENT FOR
THE DOUGLAS TAVISTOCK JOINT VENTURE'S
(DTJV) PROPOSED Middelburg Water
Reclamation Project (MWRP),
Middelburg, Mpumalanga Province**

(MDEDET Ref No: 17/23/N28 and DEA Ref No:
12/9/11/L492/6)

**REGISTRATION AND COMMENT FORM
Accompanying Background Information
Document
February 2011**

Public Participation Office



Nicolene Venter/Andraa Gibb
SIVEST Environmental
PO Box 2921, RIVONIA, 2128
Tel (011) 798 0600
Fax (011) 803 7272
Email andreaag@sivest.co.za

Please complete and return by post, fax or e-mail to the Public Participation Office (as above) by **FRIDAY 11 MARCH 2011**

TITLE	Ms	FIRST NAME	Gillian
INITIALS	G.S	SURNAME	Moloto
ORGANISATION	Lepelle Northern Water		
POSTAL ADDRESS	Private Bag x 9522, Polderwane		
TEL NO	015 295 1800	POSTAL CODE	0700
CELL PHONE NO	083 535 1992	FAX NO	086 275 4308
E-MAIL ADDRESS	gillianm@lepelle.co.za		

REGISTRATION AS INTERESTED AND AFFECTED PARTY (I&AP) (please circle applicable box)

Please formally register me as an interested and affected party (I&AP) so that I may receive further information and notifications during the EIA process	<input checked="" type="radio"/> YES	<input type="radio"/> NO
I would like my notifications by*	Letter (mail)	<input type="radio"/>
	E-mail	<input checked="" type="radio"/>
*Please tick the appropriate box	Fax	<input type="radio"/>
	Telephone (Telkom / Cellular)	<input type="radio"/>
I would like to receive documents for comment as follows*	Paper copies	<input type="radio"/>
	By e-mail	<input checked="" type="radio"/>
* Please tick the appropriate box	On CD	<input type="radio"/>
In terms of GNR 543 (Regulation 56 (1)(c)) (EIA process regulations) I disclose below any direct business, financial, personal or other interest that I may have in the granting or rejection of the application for environmental authorisation:		
NONE		

COMMENTS (please use separate sheets if you wish)

I suggest that the following issues of concern be investigated in the EIA:
 Compliance (Water Quality) with Industrial effluent discharge limits ie Sulphates.

I suggest the following for the EIA process and / or the public participation process:
 Water Quality concerns (Upstream and Downstream) the receiving water bodies

Please contact the following colleagues/friends to register as I&APs for this EIA (name and contact details e.g. e-mail address)

We take note of the closing date of 18/04/2011 for the commenting period of the draft, we therefore eagerly await the final scoping report.

THANK YOU FOR YOUR CONTRIBUTION

Signature

Date

Andrea Gibb

From: Koos Pretorius [d.zoekop@lando.co.za]
Sent: Tuesday, April 19, 2011 4:11 PM
To: Andrea Gibb
Subject: RE: MWRP: Draft Scoping Review period ending today - Tuesday 19 April 2011

Andrea

We only received the report last week.

We will need to know the amount of financial provision (for the life cycle of the impact) for the treatment of the water and how it will be provided for.

This must be done at different discount rates and these must include 0%, 1%, 2%, 4%, 6%, 8% for periods of 25 years, 50 years, 100 years and 200 years. The method of provision (trust fund, bank guarantee, etc) must also be discussed in detail as to why the method chosen is preferred.

Koos Pretorius

From: Joanne Turner [<mailto:JoanneT@sivest.co.za>]
Sent: 19 April 2011 09:36 AM
Cc: Nicolene Venter; Andrea Gibb; 'Jacqui Hex'
Subject: MWRP: Draft Scoping Review period ending today - Tuesday 19 April 2011
Importance: High

Dear Stakeholder

This e-mail serves to inform you that the review period for the Draft Scoping Report for the Middelburg Water Reclamation Project ends today, close of business day. We would like to thank those who have submitted comments on the Draft Scoping Report. If you have comments that you would like to make but have not yet submitted them, please do so before the close of business today.

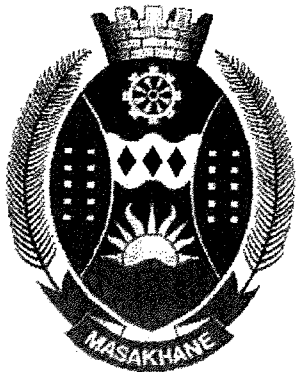
Kind Regards

ANDREA GIBB
Environmental Consultant
SiVEST Environmental Division

direct +27 11 798 0638 tel +27 11 798 0600 fax +27 11 803 7272
email andrea@zivest.co.za website www.zivest.co.za

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STEVE TSHWETE LOCAL MUNICIPALITY

Your ref.

Telephone (013) 2497000

Fax (013) 2432550

Our ref. 1/147; 7/2/3/4 [MM 54391]

P O Box 14

MIDDELBURG, MPUMALANGA

2011/05/04

1050

E-Mail : council@stevetshwetelm.gov.za

www.stevetshwetelm.gov.za

Jones & Wagener Consulting Engineers
P O Box 1434
RIVONIA
2128

Dear Mr. M Van Zyl

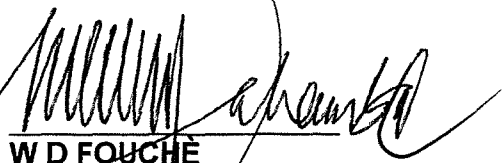
COMMENTS ON THE DRAFT SCOPING REPORT FOR THE PROPOSED WATER RECLAMATION PLAN PROJECT (MDEDET 17/2/3/N28; DEA 12/9/11/L492/6; MINING LICENSE 9/99 ISSUED UNDER DMR REF: OT/5/3/2/49 CONVERSION UNDER DMR REF NUMBER MP 30/5/1/2/2/379 MR)

The above-mentioned subject matter refers.

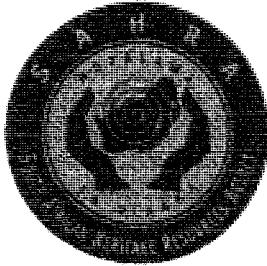
You are hereby informed that the scoping report for this project has been reviewed by this local municipality. In general, this municipality is satisfied with the content of the scoping report particularly regarding the issues that have been identified, specialist studies to be conducted and involvement of all the relevant interested and affected parties.

Enquiries in this regard may be directed to M M Mahamba at (013) 249 7178.

Yours faithfully



W D FOUCHE
MUNICIPAL MANAGER



SOUTH AFRICAN HERITAGE RESOURCES AGENCY
111 HARRINGTON STREET, CAPE TOWN, 8001
PO BOX 4637, CAPE TOWN, 8000
TEL: 021 462 4502 FAX: 021 462 4509

FOR ATTENTION: PHRA: **Mpumalanga**

FOR OFFICIAL USE ONLY:

SAHRA File No 9/2/242/0004

Date Received: 15 March 2011

Date of Comment: 10 May 2011

Sent to Peer Review:

Date to Peer Review:

SAHRA Contact Person: **Mr. Phillip Hine**

DME Ref No:

**REVIEW COMMENT ON
ARCHAEOLOGICAL IMPACT ASSESSMENT**

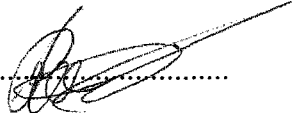
BY ARCHAEOLOGY/ PALAEOLOGY UNIT OF THE HERITAGE RESOURCES AGENCY

South Africa has a unique and non-renewable archaeological and palaeontological heritage. Archaeological and palaeontological sites are protected in terms of the National Heritage Resources Act (Act No 25 of 1999) and may not be disturbed without a permit. Archaeological Impact Assessments (AIAs) and Palaeontological Impact Assessments (PIAs) identify and assess the significance of the sites, assess the potential impact of developments upon such sites, and make recommendations concerning mitigation and management of these sites. On the basis of satisfactory specialist reports SAHRA or the relevant heritage resources agency can assess whether or not it has objection to a development and indicate the conditions upon which such development might proceed and assess whether or not to issue permission to destroy such sites. AIAs and PIAs often form part of the heritage component of an Environmental Impact Assessment or Environmental Management Plan. They may also form part of a Heritage Impact Assessment called for in terms of section 38 of the National Heritage Resources Act, Act No. 25, 1999. They may have other origins. In any event they should comply with basic minimum standards of reporting as indicated in SAHRA Regulations and Guidelines. This form provides review comment from the Archaeologist of the relevant heritage resources authority for use by Heritage Managers, for example, when informing authorities that have applied to SAHRA for comment and for inclusion in documentation sent to environmental authorities. It may be used in conjunction with Form B, which provides relevant peer review comment.

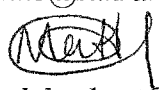
- A. PROVINCIAL HERITAGE RESOURCES AUTHORITY: **Mr. Benjamin Moduka**
- B. AUTHOR(S) OF REPORT: **De Jongh**
- C. ARCHAEOLOGY CONTRACT GROUP: **Cultmatrix**
- D. CONTACT DETAILS: **P.O. Box 12013, Queenswood 0121**
- E. DATE OF REPORT: **1 February 2011**
- F. TITLE OF REPORT: **Heritage Impact Assessment Revision 2 in connection with amendments to the Middelburg Water Reclamation Project, Steve Tshwete Local Municipality, Mpumalanga.**
- G. Please circle as relevant: Archaeological component of EIA / EMP / HIA / CMP Other (Specify)
- H. REPORT COMMISSIONED BY (CONSULTANT OR DEVELOPER): **SiVEST**
- I. CONTACT DETAILS: **P.O. Box 2921 Rivonia 2128**
- J. COMMENTS:

Please see comment on next page.....

- Where bedrock is to be affected, or where there are coastal sediments, or marine or river terraces and in potentially fossiliferous superficial deposits, the developer must ensure that a professional Palaeontological Desk Top study is undertaken to assess whether or not the development will impact upon palaeontological resources. If this is deemed unnecessary, a letter of recommendation for exemption from a professional Palaeontologist is needed. If the area is deemed sensitive, a full Phase 1 Palaeontological Impact Assessment will be required and if necessary a Phase 2 rescue operation might be necessary (see attached list of accredited Palaeontologists).
- Decisions on Built Environment (e.g. structures over 60 years) and Cultural Landscapes are not the function of this unit. Please refer to Mpumalanga Provincial Heritage Authority (Mr. Benjamin Moduka bmoduka@mpg.gov.za) to whom we will send the Impact Assessment Report and this Comment.

SIGNATURE OF ARCHAEOLOGIST PROCESSING REPORT:.....

EMAIL: *phine@sahra.org.za*

SIGNATURE OF SAHRA HEAD ARCHAEOLOGIST: 

EMAIL: *nndobochani@sahra.org.za*

NAME OF HERITAGE RESOURCES AGENCY: *SAHRA*.....

PLEASE NOTE THAT THE COMMENT (ABOVE OR APPENDED) CONSTITUTES THE COMMENT OF THE HERITAGE RESOURCES AGENCY ARCHAEOLOGIST AND THAT ANY DEVELOPMENT THAT INVOLVES DESTRUCTION OF ANY ARCHAEOLOGICAL/PALAEONTOLOGICAL SITE IS STILL SUBJECT TO A PERMIT/PERMISSION FOR DESTRUCTION OF SUCH SITE GIVEN TO THE DEVELOPER BY THE RELEVANT HERITAGE RESOURCES AGENCY ARCHAEOLOGICAL AND PALAEONTOLOGICAL PERMIT COMMITTEE (THIS WILL BE SUBJECT TO APPROVAL OF THE PHASE 2 OR ARCHAEOLOGICAL/PALAEONTOLOGICAL MITIGATION AS NECESSARY). THIS REPORT MAY BE TAKEN ONLY AS APPROVAL IN TERMS OF SECTION 35 OF THE NATIONAL HERITAGE RESOURCES ACT. THE PROVINCIAL MANAGER OF THE HERITAGE RESOURCES AUTHORITY MUST ADVISE AS TO APPROVAL IN TERMS OF HERITAGE ISSUES ENCOMPASSED BY OTHER ASPECTS OF THE LEGISLATION, SUCH AS ISSUES OF THE BUILT ENVIRONMENT (STRUCTURES (E.G. FARM HOUSES), OVER 60 YEARS), INDIGENOUS KNOWLEDGE SYSTEMS OR OF CULTURAL LANDSCAPES AS THIS IS NOT WITHIN THE SCOPE OF THE ARCHAEOLOGIST.

PLEASE NOTE THAT SAHRA IS NOW RESPONSIBLE FOR GRADE I HERITAGE RESOURCES (AND EXPORT) AND THE PROVINCIAL HERITAGE RESOURCES ARE RESPONSIBLE FOR GRADE II AND GRADE III HERITAGE RESOURCES, EXCEPT WHERE THERE IS AN AGENCY ARRANGEMENT WITH THE PROVINCIAL HERITAGE RESOURCES AUTHORITY.

REVIEW COMMENT ON ARCAHEOLOGICAL IMPACT ASSESSMENT

De Jongh, R

Date Received: 15/03/2011 Comment: 10/05/2011

Heritage Impact Assessment Revision 2 in connection with amendments to the Middelburg Water Reclamation Project, Steve Tshwete Local Municipality, Mpumalanga.

INTRODUCTION

A Heritage Assessment was conducted for the Middelburg Water Reclamation Project in the Steve Tshwete Local Municipality, Mpumalanga Province. According to the Assessment, no archaeological resources were identified in the project area. However, it was noted that archaeological resources in the form of Stone Age sites are located within the larger area.

DISCUSSION

Two Alternative pipeline routes were evaluated for the proposed project. According to the specialist report Alternative 1 will traverse cultivated land (maize) and grazing areas. However, the remains of the Goedehoop Farmstead (MM10) and a ruin on the treatment plant site may be affected by the proposed project, although these two resources have low heritage significance.

The Alternative 2 pipeline will traverse old farm land, run past a colliery and along an existing farm road. According to the heritage assessment this route alignment will not have any impact on heritage resources. The Klipfontein pipeline will also not affect any heritage resources since it traverses cultivated land, farms roads and mining areas.

According to the report the treatment plant will be located on environmentally degraded land characterized by old cultivated and grazing land and eucalyptus plantations. However, it also noted that old borrow pit (MM9) and ruins (MM5) are present but are of low heritage significance.

RECOMMENDATIONS

Since no archaeological or any other heritage resources were identified, SAHRA APM Unit has no objections to the proposed development in terms of the archaeological component of the heritage resources.

- The recommendation that Alternative 2 route alignment be used is supported since this alignment is not envisaged to impact on any known heritage resources.
- If any evidence of archaeological sites or artefacts, or other heritage resources are found during construction activities, the SAHRA APM Unit (**Mrs. Nonofho Ndobochani, Mr. Phillip Hine, tel: 021-462 4502**), must be alerted immediately, and a professional archaeologist/palaeontologist must be contacted as soon as possible to inspect the findings at the cost of the developer. If the newly discovered heritage resources prove to be of archaeological/palaeontological significance, then a Phase 2 rescue operation might be necessary at the cost of the developer.

Andrea Gibb

From: Jacqui Hex [jacqui@jaws.co.za]
Sent: Monday, June 13, 2011 7:47 AM
To: marlaineA@L2B.co.za
Cc: Mike Palmer; vanzyl@jaws.co.za; Nicolene Venter; Kelly Tucker; Andrea Gibb
Subject: FW: EIA Ref :12/9/11/L492/6
Attachments: Marlaine Andersen.vcf

Dear Marlaine,

Please note that the Middelburg Water Reclamation Project is currently in scoping phase with the Final Scoping Report submitted for authorities review and approval. Environmental Authorisation will depend on the authorities approval timeframe.

Please can you register as an Interested and Affected Party with SiVest via our public participation process. This process will allow you to be kept up to date throughout the EIA process.

SiVest contact details are as follows:



Environmental Division
51 Wessels Road, Rivonia, 2128
P O Box 2921, Rivonia. 2128

Contact persons: Nicolene Venter or Andrea Gibb

Phone: + 27 11 798 0600

Fax: + 27 11 803 7272

E- mail: andreag@sivest.co.za

Web site : www.sivest.co.za

Kind Regards

Jacqui Hex
for Jones & Wagener

☎ +27 82 560 8601

☎ +27 11 519 0200

☎ +27 11 519 0201

✉ jacqui@jaws.co.za

✉ PO.Box 1434; Rivonia; 2128



From: Marlaine Andersen [<mailto:MarlaineA@L2B.co.za>]

Sent: 10 June 2011 11:46 AM

To: palmer@jaws.co.za

Subject: EIA Ref :12/9/11/L492/6

Dear Sir

Private Projects is following the Water Reclamation Project, Mpumalanga which is currently undergoing an EIA. Please could you advise the current status of the EIA and when you expect to receive approval?

Many thanks

Kind regards

Marlaine Andersen
Senior Regional Content Researcher
Private Projects
Leads 2 Business (www.L2B.co.za)
Incorporating:
www.DailyTenders.co.za | www.PrivateProjects.co.za | www.L2Q.co.za
Tel: 0860 836337
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Fax: 033 3435882

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Andrea Gibb

From: Ehlers, Liesel (MFC) [Liesel.Ehlers@SamancorCr.com]
Sent: Friday, June 10, 2011 11:00 AM
To: Nicolene Venter
Cc: Andrea Gibb
Subject: FW: MWRP: Reminder - Final Scoping Review period nearing its end - Tuesday 14 June 2011

Importance: High

Hi Nicolene

I cannot see that have this document and can therefore not comment.

The number provided below for Lindie Moore does not work – I tried 4 times now and nothing goes through.

Please send me what you have

Thanks

Regards

Liesel

From: Booysen, Heather (Corporate)
Sent: 09 June 2011 03:14 PM
To: Ehlers, Liesel (MFC)
Subject: FW: MWRP: Reminder - Final Scoping Review period nearing its end - Tuesday 14 June 2011
Importance: High

Do you have this?

From: Nicolene Venter [<mailto:NicoleneV@sivest.co.za>]
Sent: 09 June 2011 02:37 PM
To: Kelly Tucker
Cc: 'andeag@sivest.co.za'
Subject: MWRP: Reminder - Final Scoping Review period nearing its end - Tuesday 14 June 2011
Importance: High

Dear Stakeholder

This e-mail serves as a reminder that the Final Scoping Report for the Middelburg Water Reclamation Project has been made available for review and comment from **Wednesday 25 May 2011** to **Tuesday 14 June 2011** (end of business day) at the following public places in the Steve Tshwete Municipal Area:

Venue	Street Address	Contact No
Middelburg Mines	Adjacent to Middelburg –Van Dyk's Drift Road, R575	Lindie Moore 013 689 3051
Naledi Village	Adjacent to Middelburg – Van Dyk's Drift Road, R575	Lindie Moore 013 689 3051
Gerard Sekoto Public Library	Wanderers Avenue, Middelburg	013 249 7297
Mhluzi Public Library	Ngwako Street, Mhluzi	013 242 1030
Eastdene Public Library	Verdoorn Street, Middelburg	013 249 7275

The review period is nearing its end and if you have not yet submitted your comments on the Final Scoping Report, we urge you to please to so.

Please send your comments to:
Nicolene Venter or Andrea Gibb
PO BOX 2921, Rivonia, 2128

Tel: (011 798 0600
Fax: (011) 803 7272
E-mail: andreag@sivest.co.za

Kind regards
NICOLENE VENTER
Snr Public Participation Practitioner
SIVEST Environmental Division

direct +27 11 798 0635 **tel** +27 11 798 0600 **fax** +27 11 803 7272 **cell** +27 83 377 9112
e-mail nicolenev@sivest.co.za **website** www.sivest.co.za

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Andrea Gibb

From: Leads 2 Business [noreply1@l2b.co.za]
Sent: Monday, June 13, 2011 11:44 AM
To: Andrea Gibb
Subject: [?? Probable Spam] 8480 Water Reclamation Project, Mpumalanga

Good day,

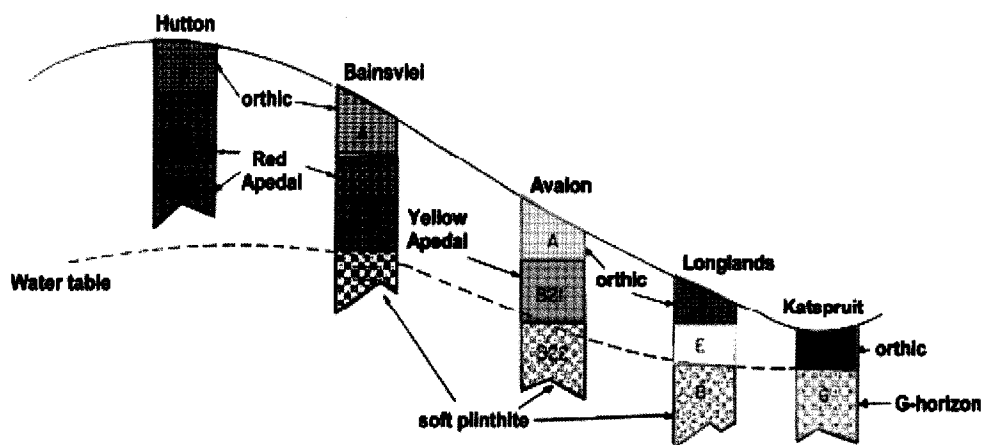
We recently acquired the RSA rights for the Azud range of filters and water treatment equipment and would appreciate it tremendously if we can at some stage have a look at the reclamation challenge in order to assess if our products could be used at all in the solution.

Your assistance will be highly appreciated!

Danie Joubert
082 458 5666
General Manager

Soils and Wetlands (From a GCS Scoping report)

The Highveld Plinthic Catena (Figure 9) is "driven" by water. This means that the soils have formed as a function of the dominant geology (parent material), topography and water in the landscape. In Figure 10 an idealised landscape is presented and a number of assumptions made. Water movement in a landscape is subject to gravity and as such it will follow the path of least resistance towards the lowest point. In the landscape there are a number of factors determining the paths along which this water moves. The total precipitation (rainfall) on the landscape from the crest to the lowest part or valley bottom is taken as 100%. Most geohydrologists agree that total recharge, the water that seeps into the underlying geological strata, is less than 4% of total precipitation for most geological settings (and less than 3% for the sandstones of the Highveld. Surface runoff varies considerably according to rainfall intensity and distribution, plant cover and soil characteristics but is taken as a realistic 6% of total precipitation for our idealised landscape. The total for surface runoff and recharge is therefore calculated as 10 % of total precipitation. If evapotranspiration (from plants as well as the soil surface) is taken as a very high 30% of total precipitation it leaves 60% of the total that has to move through the soil from higher lying to lower lying areas. In the event of an average rainfall of 750mm per year it results in 450mm per year having to move laterally through the soil. In a landscape there is a cumulative effect as water from higher lying areas flow to lower lying areas.



Highveld Plinthic Catena

Figure 9: Typical Highveld Plinthic catena indicating the position of a regularly occurring water table

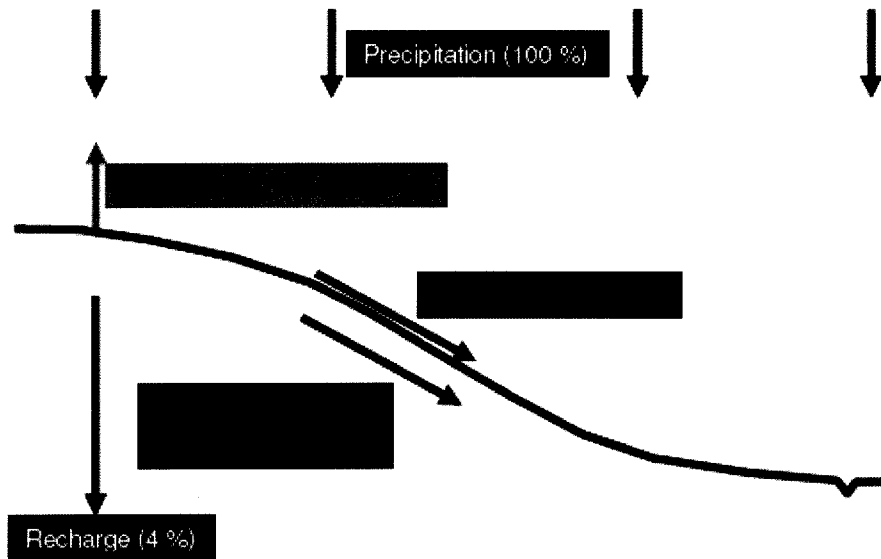


Figure 10: Idealised landscape with assumed quantities of water moving through the landscape expressed as a percentage of total precipitation (100%)

The expression of soil characteristics as indicated in Figure 9 is a direct result of the soil forming processes determined by the water movement through the landscape. Wetland soils are restricted to the bottom and then typically expressed as soils such as the Longlands and Katspruit forms. These soil forms as well as indicators of soil wetness ("hydromorphism") are used to delineate wetlands and their buffer zones. Due to a range of restrictions on crop production these areas are often not used for that purpose. If the wetland areas are conserved as vegetation and animal corridors and the other areas (non-wetland) are mined out the result will be a total degradation of the wetland systems and therefore collapsing of the vegetation communities that are supposed to function as the corridors. The main reason for this is that the hydrological integrity of the landscape will be compromised through the truncating of what were continuous flow zones of subsurface water through the soils. This aspect should be investigated in detail when a decision is made as to the conservation of wetland areas in the survey area during and after mining.

The Implications of the above is as follows: (JP Pretorius)

	<i>Pre mining (from above)</i>	<i>Post mining (JP Pretorius)</i>
Recharge	4%	20%
Runoff	6%	20%
Evapo transpiration	30%	15%
Sub surface (Superficial aquifer)	60%	50%

Rainfall:	750	mm			
			Pre Mining	Post Mining	Decant
		mm	Cub M		Cub M
Recharge	4%	30	300	4%	<u>300</u>
Runoff	6%	45	450	15%	1125
Evapo-transpiration	30%	225	2250	15%	1125
Sub surface	60%	450	4500	66%	<u>4950</u>
		0			
	100%	750	7,500	100%	7500
			1	ha	<u>5,250</u>
			Used by mines	Hodgson 15 %	1125
				Difference	4,125

Recharge increases in line with the average of Hodgson

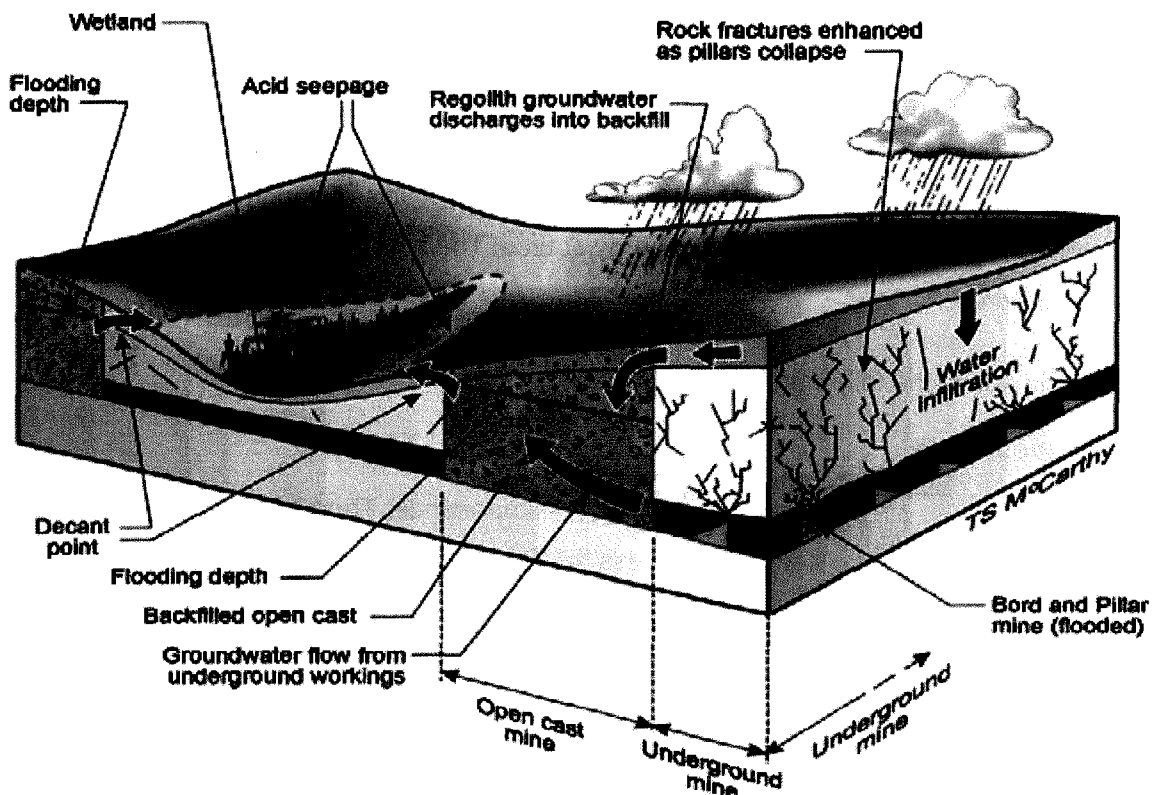
Runoff increases due to the sloping employed as well as the hard setting. Settling will have the opposite effect and lower the runoff.

Evapo transpiration decreases significantly due to the lower basal cover in the rehabilitated areas.

Superficial aquifer –it has to be the subtraction of all of the above from the 100 %

The above shows a lot more water (50 %) going into the mine workings that what Prof Hodgson found in his report and what is being used (15 – 25 %) since the superficial aquifer was destroyed during mining, and the cur't off layer will not prevent that water

from reaching the pit. One must take into account that most mines only have 300 – 500 mm of soil before the overburden formations are reached.



After closure the wetland is denied water since all water is running into the pit. The wetland will only get water if the pit is allowed to fill and then decant into the wetland.

This decant will destroy all biodiversity in the wetland.

If no decant is allowed to happen due to pumping and treatment or evaporation then the wetland will be destroyed due to it being denied the water it needs.

From the above it is clear that the only way the wetland will be able to function during and post mining is if the water is pumped, treated and then released into the wetland from the bottom edge of the pit.

All other measures are doomed to failure.

Middelburg Water reclamation Project

Our main concern is basically to ensure that sufficient provision is made for the life cycle of the impact in order to ensure that society will not have to pay in future for the impacts caused by the mines. It is therefore necessary to also calculate the financial provision without any income generated from the project. If sufficient provision is not catered for, then our grand children are going to be paying for the impacts of coal mines, and they will not be even utilising any coal as energy source. The sins of the fathers will be born by the children.

From the above the following is of importance

1 Discount rate

1.1 What rate should be applied?

- 1.1.1 This is of cardinal importance. The higher the discount rate, the less the financial provision.
- 1.1.2 It must be borne in mind that this is not a profit centre, but basically an expense of the mine in order to mitigate its impacts.
- 1.1.3 If, in future, the cost of water rises above the cost of treatment, then the project will change. To assume that money will be made is, in my opinion, not relevant at this stage.
- 1.1.4 The rate should thus reflect a stable, low risk rate of return, if any at all. (See below)

1.2 In what format should that provision be?

1.2.1 MPRDA requirements

''financial provision'' means the insurance, bank guarantee, trust fund or cash that applicants for or holders of a right or permit must provide in terms of sections 41 and 89 guaranteeing the availability of sufficient funds to undertake the agreed work programmes and to rehabilitate the prospecting, mining, reconnaissance,

exploration or production areas, as the case may be;

41 (3) The holder of a prospecting right, mining right or mining permit must annually assess his or her environmental liability and increase his or her financial provision to the satisfaction of the Minister

41(4) If the Minister is not satisfied with the assessment and financial provision contemplated in this section, the Minister may appoint an independent assessor to conduct the assessment and determine the financial provision

89. In addition to section 5(4), no exploration operation or production operation may commence unless the holder of the rights concerned has provided for a financial provision acceptable to the designated agency guaranteeing the availability of sufficient funds for the due fulfilment of all exploration and production work programmes by the holder.

1.3 Risk averse and precautionary approach – Risk vs returns

1.3.1 The above is of extreme importance and speaks to , inert alia, two issues. At all times a risk averse and cautious approach has to be maintained when returns are planned and managed for – especially when higher risk and return options are evaluated. The time frames these funds will have to extend into at least hundreds of years.

1.3.2 Discount rate used

An appropriate discount rate has to be used that reflect the fact that this is not a high risk high return

business venture, but rather a necessary expense where the income generated will have to last of many hundreds of years. Conservative management practises must be employed and this will lead to conservative income being generated.

In view of the above we request that discount rates of 0% , 1% , 2% and 4% is also calculated and that the calculations model be made available for us to assess it..

1.3.3 Type of fund and provision established

The MPRDA speaks of three possibilities

1.3.3.1 *Insurance* – I have never come across this one and I think that it speaks volumes for the risk involved that no insurance company is prepared to venture into this huge potential field of activity

1.3.3.2 *Bank Guarantee* – This is seen less and less and mostly from small companies and over short periods of time (Life cycle of the mine) One of our main concerns here is that the bank guarantee is only a guarantee to pay if funds are available.

1.3.3.3 *Trust fund* – At issue here is who is the gate keeper ? What are the set of criteria that regulates the trading and managing of these funds? What are the requirements of these fund managers? We have never delved into these since we have never had any experts to back us up, but I think it is high time we resolve these issues – especially light of the impacts and the period of time that the funding will have to make provision for.

1.3.4 The above options have to be analysed as to its weaknesses and strengths taking into account the time period that the final provision has to last.

2 Time

2.1 *Expected life cycle of the impacts*

This is of critical importance and becomes even more critical the lower the discount rate that is being used. Input from geochemists and hydrogeologists will be needed to calculate the rate of pyrite being oxidised and from that the amount of time the reactions will continue to happen.

3 Volumes of water

3.1 Hodgson report and rainfall balance pre and post mining

Prof Hodgson did calculations and predictions on 10 mines in the Witbank area. There has however never been a study to validate the figures.

We have a big problem with how the water balance of the rainfall pre and post mining is calculated. This does not conform to Hodgson's figures, and as a lot of rainfall water is simply lost in the system if Hodgson's figures are used. I have attached a doc on that.

This must be discussed at length and finality on the figures must be reached in order to make provision for the right amount of AMD to be treated.

	<i>Pre mining</i>	<i>Post mining</i>
Recharge	4%	15%
Runoff	6%	20%
Evapo transpiration	30%	15%
Sub surface (Superficial aquifer)	60%	50%

Andrea Gibb

From: COLETTE SCHEERMAYER [CSCHEERMAYER@sahra.org.za]
Sent: Friday, June 17, 2011 8:18 AM
To: Andrea Gibb <AndreaG@sivest.co.za>
Subject: Fwd: RE: ARC_Middelburg Water Reclamation_de Jongh_Feb2011

Dear Andrea,

Our correspondence re: the Middleburg Water Reclamation Project has reference.

SAHRA has commented as indicated to Nicolene Venter in the email below. She has sent an email this morning acknowledging receipt of that comment from Mr Phillip Hine.

In future it would be best to send all impact assessments and related correspondence for projects in Mpumalanga and Limpopo to Mr Hine. I deal exclusively with the North West Province. It would avoid any confusion in future.

Kind regards,

Colette

Mrs Colette Scheermeyer
Assistant Archaeologist
South African Heritage Resources Agency
PO Box 4637, Cape Town 8000, South Africa
E-mail: cscheermeyer@sahra.org.za
Phone : 27 (0)21 462 4502
Fax : 27 (0)21 462 4509
Web : www.sahra.org.za

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~~~~~  
>>> Nicolene Venter <NicoleneV@sivest.co.za> 2011/06/17 03:57 AM >>>
Dear Colette

Thank you for this notification, we will ensure that we link your name only to our North West Province EIAs/Bas and that of Phillip Hine to Mpumalanga and Limpopo Provinces.

And to confirm, yes, we did received his comments.

Kind regards
Nicolene

-----Original Message-----

From: COLETTE SCHEERMEYER [mailto:CSCHEERMEYER@sahra.org.za]
Sent: 14 June 2011 11:06
To: Nicolene Venter
Subject: Fwd: ARC_Middelburg Water Reclamation_de Jongh_Feb2011

Dear Nicolene,

I received a notification email for response to the Middleburg Water Reclamation Project. My colleague, Mr Phillip Hine has already commented on the HIA done by Cultmatrix. I attach for your ease of reference the email with attached comment he sent to you.

I'm sorry for any confusion but I thought this project was in North West which is the province I deal with. In future it would be best to send all Mpumalanga and also Limpopo projects to Mr Hine. I deal exclusively with the North West Province.

Kind regards,

Colette

Mrs Colette Scheermeyer
Assistant Archaeologist
South African Heritage Resources Agency
PO Box 4637, Cape Town 8000, South Africa
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~~~~~

>>> PHILLIP HINE 2011/06/14 11:00 AM >>>

Phillip Hine
APM Impact Assessor
South African Heritage Resources Agency
111 Harrington Street
PO Box 4637, Cape Town 8000,
South Africa
E-mail: phine@sahra.org.za
Phone : +27 (0)21 462 4502
Fax : +27 (0)21 462 4509
Web : www.sahra.org.za

>>> PHILLIP HINE 2011/06/10 09:24 AM >>>

Dear Nicolene,

Please find attached Archaeological Review Comment.

Yours sincerely
Phillip Hine

Phillip Hine
APM Impact Assessor
South African Heritage Resources Agency
111 Harrington Street
PO Box 4637, Cape Town 8000,
South Africa
E-mail: phine@sahra.org.za
Phone : +27 (0)21 462 4502
Fax : +27 (0)21 462 4509
Web : www.sahra.org.za

>>> PHILLIP HINE 2011/05/25 04:22 PM >>>

Dear All

Please find attached Archaeological Review Comment for the above project.

A copy of the original signed copy and cover letter will be send to Jones Wagener Consulting Civil Engineers.

A copy of this ARC will also be send tp Mpumalanga PHRA.

Yours sincerely
Phillip Hine

Phillip Hine
APM Impact Assessor
South African Heritage Resources Agency
111 Harrington Street
PO Box 4637, Cape Town 8000,
South Africa
E-mail: phine@sahra.org.za
Phone : +27 (0)21 462 4502
Fax : +27 (0)21 462 4509
Web : www.sahra.org.za

Andrea Gibb

From: Nicolene Venter
Sent: Monday, June 27, 2011 5:23 AM
To: Koos Pretorius; Jacqui Hex; vanzyl@jaws.co.za
Cc: 'Mariette Liefferink'; 'Chris de Bruyn'; 'Henk Smith'; Kelly Tucker; Andrea Gibb
Subject: RE: NOTIFICATION: MWRP: Final Scoping Review period ending today - Tuesday 14 June 2011

Dear Koos

Your comment regarding the response provided to your comment as mentioned below is being forwarded to Jones&Wagener, the independent environmental assessment practitioner for a response.

Kind regards

Nicolene

From: Koos Pretorius [<mailto:d.zoekop@lando.co.za>]
Sent: 24 June 2011 10:58
To: Nicolene Venter
Cc: 'Mariette Liefferink'; 'Chris de Bruyn'; 'Henk Smith'
Subject: RE: NOTIFICATION: MWRP: Final Scoping Review period ending today - Tuesday 14 June 2011
Importance: High

Nicolene

I received a final Scoping report draft yesterday via post. Thank you very much.

Please note that I am not satisfied with the response to my comment. On page 4 of the PP process (Attachment N it is stated)

*Pretorius, Koos Federation for a Sustainable Environment
E-mail: 19 April 2011*

Commented that they need to know the amount of financial provision (for the life cycle of the impact) for the treatment of the water and how it will be provided.

This will be included in the combined EIR/EMPR amendment. It is stipulated in Regulation 51 (b) v of the MPRDA that financial provision in execution of the EMPR must be included in the EMPR.

Noted that financial provision must be done at different rates and The requirements in terms of the MPRDA in terms of financial provision will be adhered to.

The requirements of s 51(b) of the MPRDA regs are only 1 part of this process. We are involved here also with NEMA and the NWA and general sustainability. .

I suggest that we get this issue resolved at this stage and not at a later stage, when it is very late in the process. The detail will need to be sorted out now so that all parties know exactly what will and will not be done and what will be made available and what will not be made available. This is of the utmost importance.

Regards

Koos Pretorius.

From: Nicolene Venter [<mailto:NicoleneV@sivest.co.za>]
Sent: 17 June 2011 04:07 AM
To: Koos Pretorius
Cc: 'Mariette Liefferink'; 'Chris de Bruyn'
Subject: RE: NOTIFICATION: MWRP: Final Scoping Review period ending today - Tuesday 14 June 2011

Dear Koos

Thank you so much – your comment will be incorporated.

Kind regards
Nicolene

From: Koos Pretorius [<mailto:d.zoekop@lando.co.za>]
Sent: 14 June 2011 06:23
To: Nicolene Venter
Cc: 'Mariette Liefferink'; 'Chris de Bruyn'
Subject: RE: NOTIFICATION: MWRP: Final Scoping Review period ending today - Tuesday 14 June 2011

Nicolene

Please find attached my comments

Regards

Koos Pretorius

From: Nicolene Venter [<mailto:NicoleneV@sivest.co.za>]
Sent: 14 June 2011 05:55 AM
To: Kelly Tucker; Andrea Gibb
Subject: NOTIFICATION: MWRP: Final Scoping Review period ending today - Tuesday 14 June 2011
Importance: High

Dear Stakeholder

This e-mail serves to inform you that the review period for the Final Scoping Report for the Middelburg Water Reclamation Project ends today, close of the business day. We would like to thank those who have submitted comments on the Final Scoping Report. If you have comments that you would like to make but have not yet submitted, please do so before the close of business today (16h00).

Please send your comments to:
Nicolene Venter or Andrea Gibb
PO BOX 2921, Rivonia, 2128
Tel – (011) 798 0600
Fax – (011) 803 7272
Email – andreag@sivest.co.za

Kind regards
NICOLENE VENTER
Snr Public Participation Practitioner
SIVEST Environmental Division

direct +27 11 798 0635 tel +27 11 798 0600 fax +27 11 803 7272 cell +27 83 377 9112
e-mail nicolenev@sivest.co.za website www.sivest.co.za

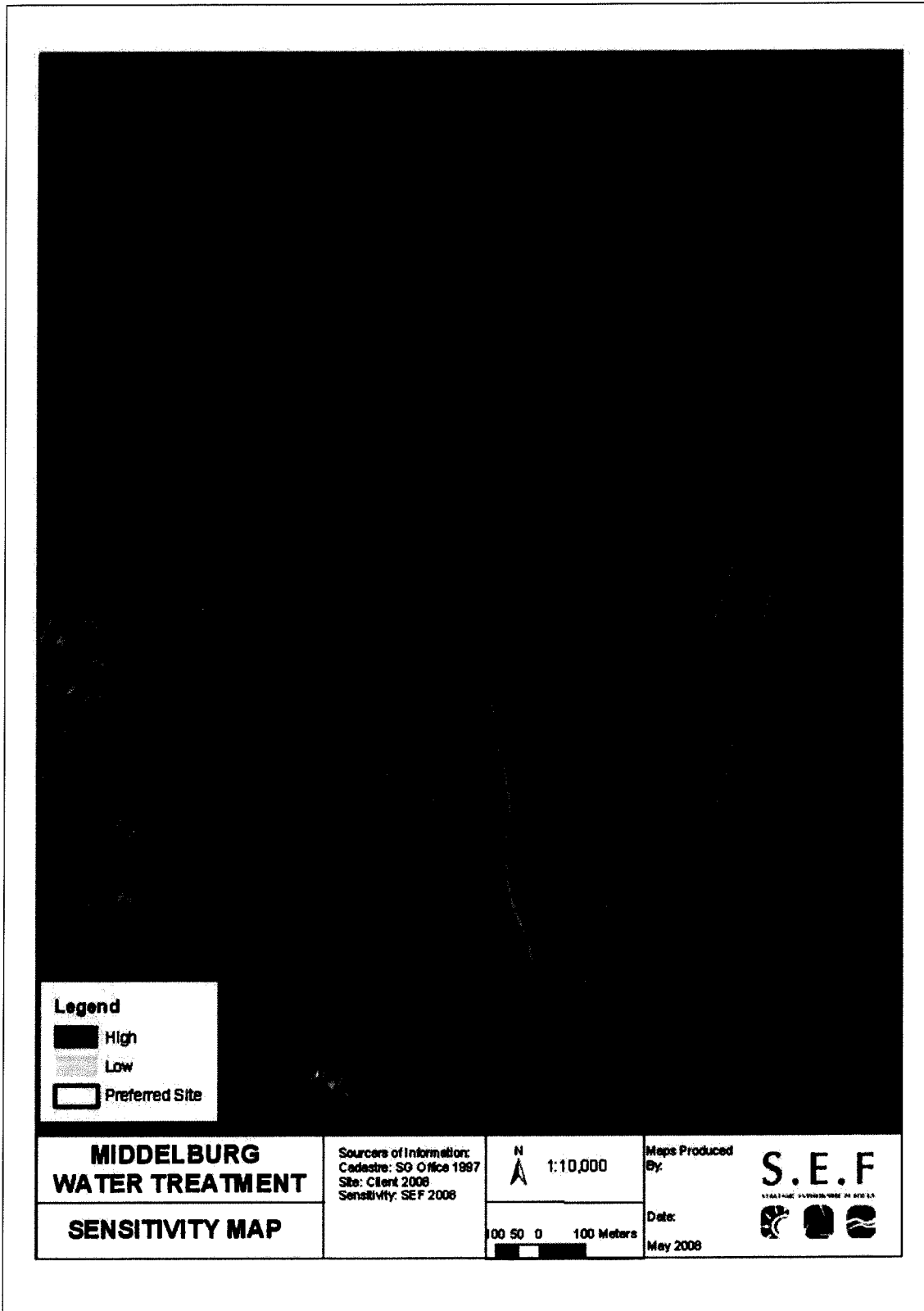


Figure B2.7 (b): Option 1: Floral Sensitivity Map (Source SEF, 2008a)

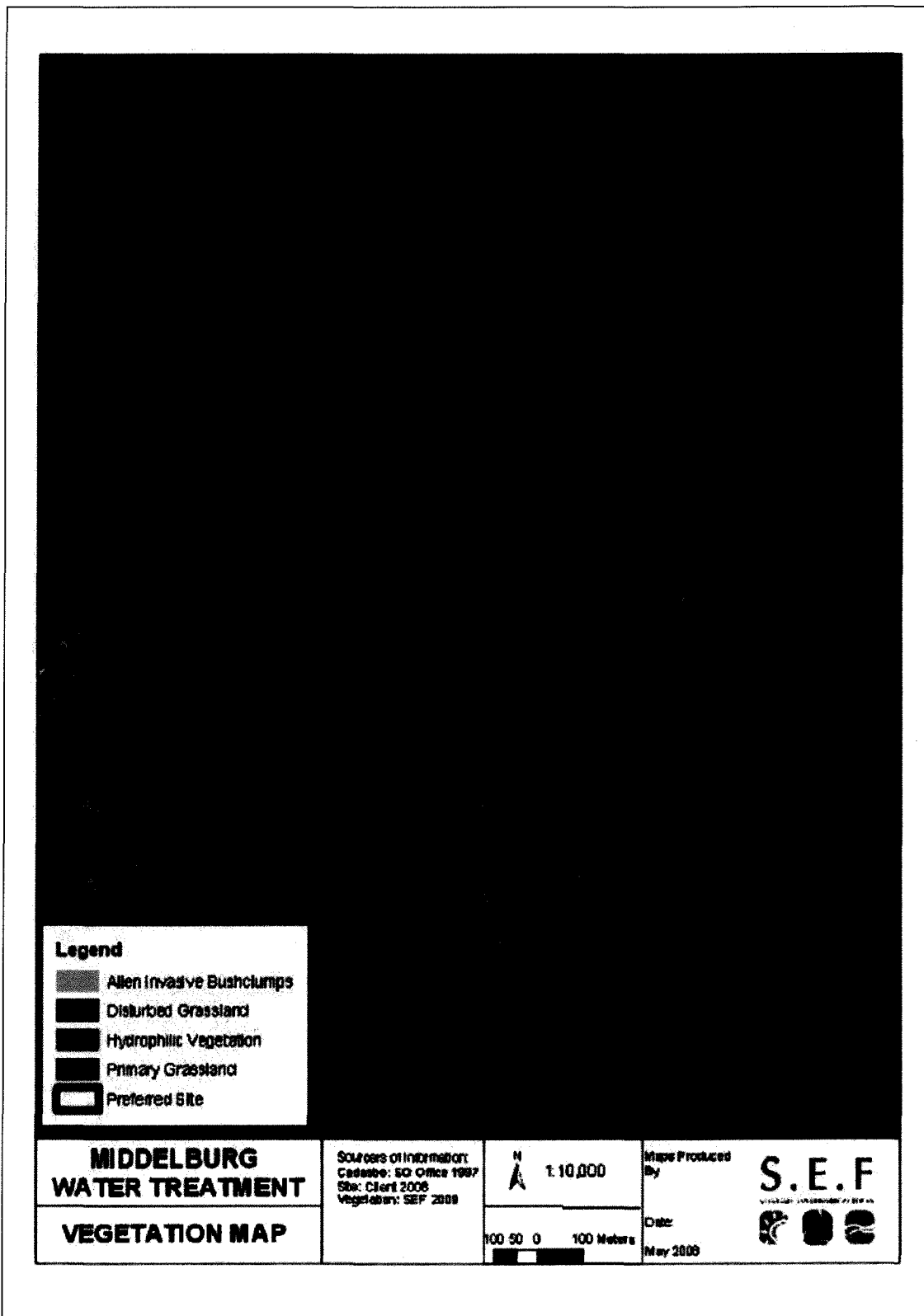


Figure B2.7 (a): Option 1: Vegetation Types (Source SEF, 2008a)

2.6 Land use

From the floral and faunal evaluation done on Option 1 by Strategic Environmental Focus (SEF), the specialist consulting firm employed to investigate and evaluate Option 1 and Option 2, it was indicated that disturbance of the grassland did occur in the past, probable due to grazing of cattle (SEF, 2008).

The foundations of two old homesteads were also identified on Option 1, which would have caused additional land disturbance during the time that they were inhabited – see Section 2.8 of Appendix B.

2.7 Biodiversity and Sensitive Landscapes

SEF undertook a floral and faunal assessment of the site in order to establish its ecological status (SEF, 2008a and SEF, 2008b). Based on the work conducted by them, Option 1 was divided into four distinct vegetation communities namely:

- Hydrophilic vegetation (wetland and pan);
- Primary grassland;
- Disturbed grassland; and
- Alien invasive bush clumps.

These four communities are depicted in **Figure B2.7 (a)**. SEF indicated that both the hydrophilic vegetation and primary grassland types are high sensitive areas and these should therefore be protected. The disturbed and alien invasive bush clumps, mostly located on the south-eastern portions of the site, was assigned a low sensitivity. The areas of high and low floral sensitivity on Option 1 are indicated in **Figure B2.7 (b)**.

From a faunal perspective, Option 1 was classified as a high sensitive area, with only a few sections of low sensitivity – see **Figure 2.7 (c)**. This was found because the alien invasive bush clumps recorded the Namaqua Rock Rat (*Aethomys namaquensis*), the Bushveld Gerbil (*Tateraleu cogaster*) and the Single Stripped Mouse (*Lemnis comysroscilia*) (SEF, 2008b).

Although a high faunal sensitivity was assigned by SEF to the low floral sensitivity area, the high concentration of small mammal occurrence is opportunistic due to the presence of the invasive vegetation. In addition, the plants in the invasive bush clumps are mostly black wattles (*Acacia mearsnii*), which is a declared invasive species and should be removed in terms of the provisions of GNR 280 of March 2001.

Based on the above findings, only the south eastern corner of Option 1 is suitable for development and only that area draining away from the pan. As a large portion of Option 1 was not suitable for development, it was decided to investigate an additional portion of land, the Extended Area to the south of Option 1 – see **Figure B 2.1**.

Based on the evaluation done by SEF (SEF, 2009 - see Appendix J) two veld types were identified on the Extended Area, namely an Eastern Highveld Grassland and Rand Highveld Grassland. Similarly to the work conducted on Option 1, investigations and evaluations resulted in the area mapped in terms of sensitivity – see **Figure B2.7 (d)**. After the Extended Area was investigated, a single map, containing both the Option 1 and Extended Area was prepared – see **Figure B2.7 (e)**. This combined area was subjected to a scoring and evaluation to determine the most suitable area.

2.2 Access

There is currently no direct access from the R575 to Option 1 and the Extended Area. Access is from small service roads within the Middelburg Mines' boundaries.

Access to the site can be gained from the R575, which requires that a formal entrance from the R575 be developed and a road to the MWRP be constructed. The proposed road has been aligned with the ESKOM high voltage power line – see **Figure B2.1**.

2.3 Topography and Drainage

Option 1 and the Extended Area are located on a relatively flat portion of land on a topographic high. The maml is approximately 1560. The south-eastern portion of the land slopes to the east at a gradient of approximately 0.8 %, which makes it suitable from a development perspective. Portions of Option 1 drain northwards towards the pan, which in itself is not free draining. The areas draining towards the pan are less suitable for development than those draining towards the east. The western sections of Option 1 drain towards the Hartbeesloop, a non-perennial stream which is located approximately 250 metres from the western boundary of Option 1. At its nearest point, Option 1 and the Extended Area are approximately 1 250 metres from the Niekerkspruit, which is located to the east of the two sites – see **Figure B2.1**.

2.4 Geology and Soils

Option 1 and the Extended Area are underlain by sedimentary rocks of the Karoo Sequence, which includes shales and sandstones of the Vryheid Formation, Ecca Group.

The soils at Option 1 are controlled by the topographic expressions on site and consequently consist of:

- A crestal profile: Typically 800 mm of hillwash, followed by a ferruginised hillwash zone, a ferruginised transition zone and residual siltstone. The crestal profile covers most of Option 1.
- A gully profile, which is located along the south western border of Option 1, comprising of 800 mm wet, grey-brown, loose, silty sand on moist, dark orange-brown mottled grey, very dense, moderately cemented and ferruginised, silty sand.
- A pan profile, which is present in the north eastern corner of the site and comprises a 300 mm grey, leached hillwash on a well cemented to hardpan ferricrete around the sides of the pan, while in the pan basin approximately 700 mm of wet, mottled grey, sandy clay on a wet clay-silt was present. (J&W, 2008).

For foundations, the hillwash horizon is not considered suitable for foundations due to the potential for both collapse and consolidation settlements that could occur. However, the well cemented and ferruginised hillwash to transition horizon, generally encountered at a depth of approximately 0.8 m and deeper, is suitable for founding purposes (J&W, 2008). See Appendix G for geotechnical report.

2.5 Services and Servitudes

A high voltage ESKOM power line is located on the southern boundary of Option 1 and the northern boundary of the Extended Area. The line runs in an east-west direction – see **Figure B2.1**.

The necessary permissions will have to be obtained where infrastructure could possibly cross the servitude, while during construction, cranes and other high equipment should not come near the lines for safety reasons.

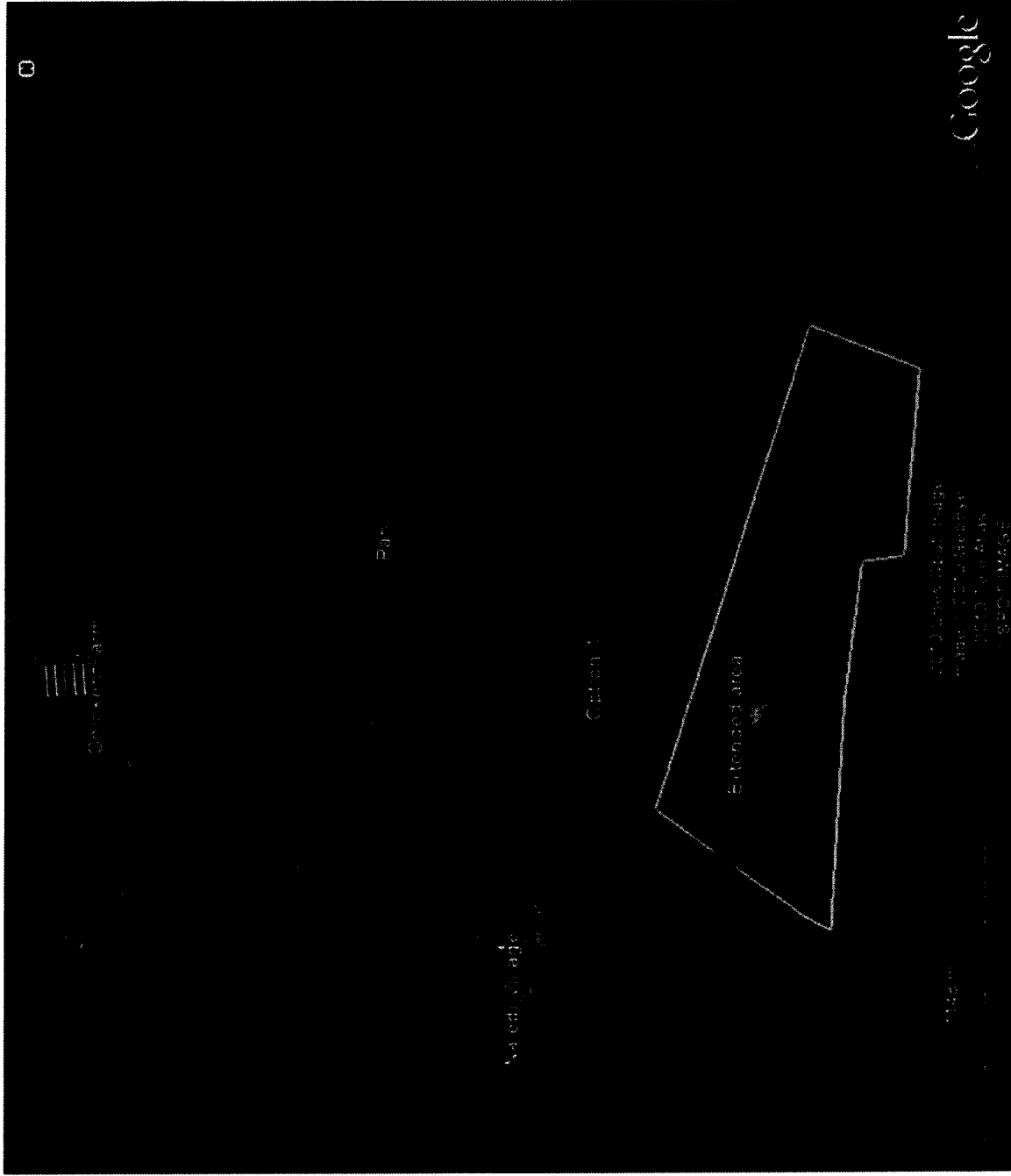


Figure B2.1: Location of Option 1

Report JW157710/B478 - Rev B



1. INTRODUCTION

In this section MWRP location Option 1 and 2 is evaluated with a view to only taking one option, the preferred option, forward in the impact assessment phase of the S&EIR. In order to evaluate the two sites or locations, a description of each is presented. In addition, the site evaluation criteria are also described, while finally a matrix is used to score each site against the evaluation criteria and then, based on the overall score, identify the option to be further investigated. This approach was agreed with the MDEDET at the pre-registration consultation meeting.

As was already mentioned, the location of the two sites was based on the fact that both the areas would not be mined due to them not being underlain with economically viable reserves of coal.

The two options, Option 1 and Option 2, are firstly described in terms of a number of aspects, such as location, access, geology, topography, biodiversity, land capability, etc.

2. OPTION 1 AND EXTENDED AREA: HARTBEEFONTEIN

2.1 Location and ownership

Option 1 and the extension of Option 1 (Extended Area) are located on the Portion 9 of the Farm Hartbeesfontein 399 JS – See **Figure B2.1**. The site covers an area of approximately 180 hectares. The land belongs to Ingwe Surface Holdings Limited (60%) and Tavistock Collieries (Pty) Ltd (40%). The surface rights belong to BECSA and the land is managed by Middelburg Mines.

As can be seen from **Figure B2.1**, the site is located to the immediate east of the R575 opposite the entrance to the Naledi Village. The Naledi Village belongs to BHP Billiton and some of their employees reside there. The R575, a secondary road, links Van Dyksdrift and Middelburg with each other. The road is frequented by large vehicles and the condition of the road is poor in a number of areas.

A chicken farm is located approximately 800 metres to the north-north-east of the northern boundary of Option 1, while two coal slurry dams are located to the immediate south of the extended area.

A large pan, with associated wetlands, is located on the northern portion of Option 1 – see **Figure B2.1**.

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DOUGLAS TAVISTOCK JOINT VENTURE

MIDDELBURG WATER RECLAMATION PROJECT

ENVIRONMENTAL IMPACT ASSESSMENT

REPORT NO: JW157/10/B478 - Rev B

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ENVIRONMENTAL IMPACT ASSESSMENT
EVALUATION OF MWRP LOCATION: OPTION 1 AND 2

Report No.: JW157/10/B478 - Rev B

November 2010

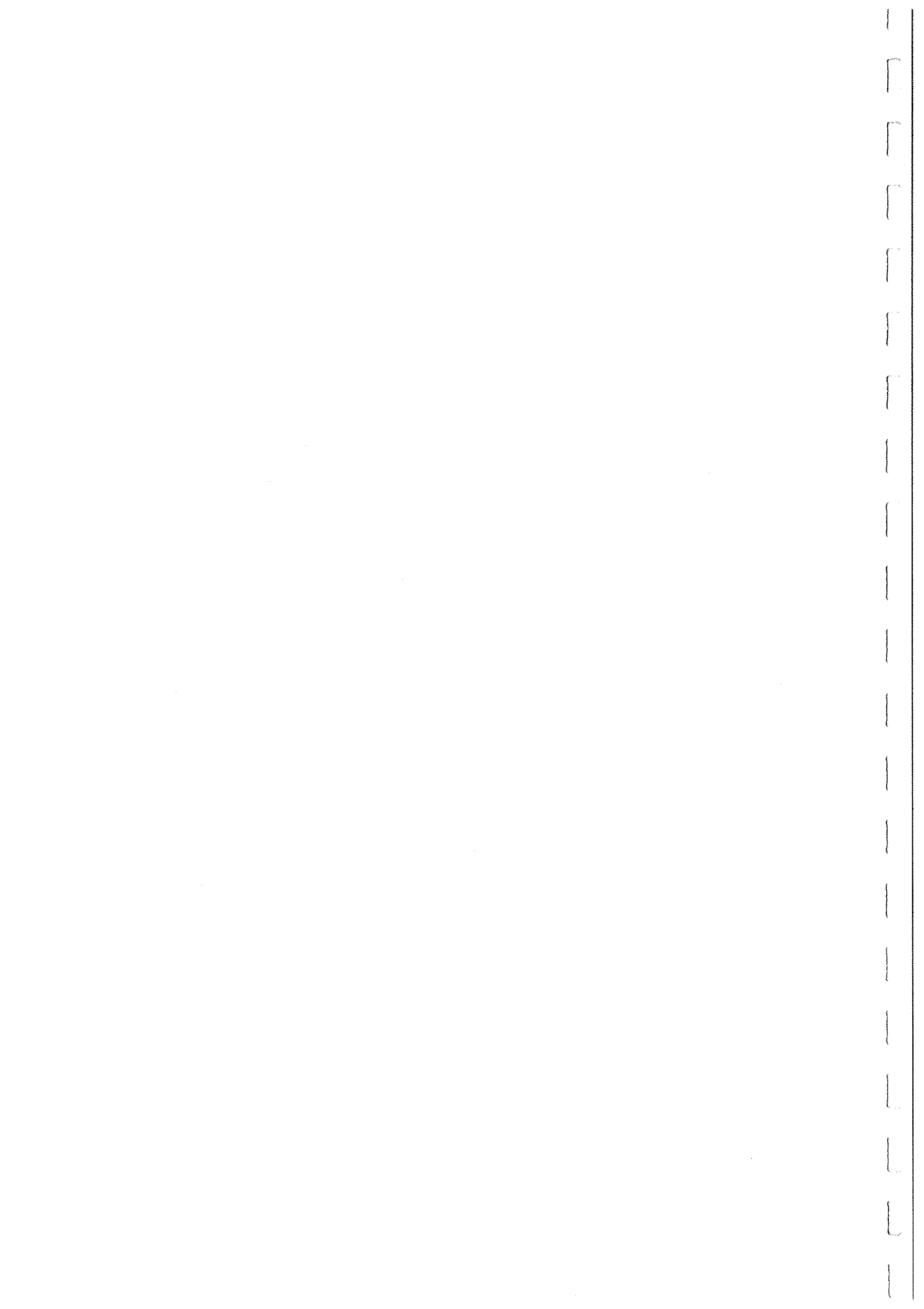
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ENVIRONMENTAL IMPACT ASSESSMENT
Draft EIR

Report: JW45/11/B478 - Rev C

Appendix C: Screening Assessment

APPENDIX C - Table of Contents

C.1 Screening Assessment of Option 1 and 2 WTP sites



Date	Activity	Notes
	Notification of Final EIR submitted to the MDEDET	To all registered I&APs
December 2011	Environmental Authorisation (EA) notification.	To all registered I&APs within 12 days of receipt of Environmental Authorisation. EA received from MDEDET & DEA letter (including appeal process) to be distributed by: <ul style="list-style-type: none"> • Advertisement • E-mail (including MDEDET's "Conditions") • SMS • Post (including MDEDET's "Conditions")

NOTES:

The assumptions for above-mentioned dates are based on:

- Acceptance of the FSR and Plan of Study for the EIA by the MDEDET
- PP Plan is subject to revisions, as and when required
- Availability of stakeholders
- Availability of venues
- Public Holidays
- Availability of reports from Jones & Wagener
- Review of reports by DTJV

9.2 Comments and Responses Report (C&RR)

Issues and concerns raised during the public participation process will be compiled into a Comments and Responses Report (C&RR). All issues, comments and concerns raised during the Impact Phase of the project will be incorporated as part of the EIR. This report will constitute an important component of the EIR, and will be an on-going record of stakeholder issues raised throughout the process. It will be categorised into disciplines required for conducting the specialist studies during the Impact Phase.

9.3 Minutes of meetings

All meetings will be minuted and the minutes will be distributed to those who attended the meetings and submitted apologies. The minutes will also be included in the relevant project reports.

9.4 Correspondence with I&APs

Comments / concerns received from I&APs, other than at meetings, will be acknowledged, in writing, to provide the I&APs the opportunity to verify that the comment(s) / concern(s) raised have been correctly captured in the C&RR.

9.5 Communication with the media

The process and recommendations made as per the Scoping Phase will be followed for the Impact Phase, unless otherwise advised by the DTJV and/or Jones & Wagener.

10 TIMEFRAMES: IMPACT PHASE

The following timetable provides an outline of when the communication efforts will take place. It should be noted that final dates are dependent on the availability of reports and authority review, as well as on the availability of venues. Final dates can only be confirmed once the Plan of Study for EIA has been accepted where after the Public Participation Process will officially commence.

The public participation activities and proposed timeframes for the Impact Phase are detailed in the table below. The dates will remain draft dates and will be updated once the Impact Phase starts.

Date	Activity	Notes
June 2011	Compilation of: <ul style="list-style-type: none"> ▪ EIA Notification letter 	To give I&APs a recap of the proposed project, and indicate the EIA and public participation process to be followed.
July 2011	Advertise PM and availability of DEIR	Inviting the public to the PM and notify availability of draft EIR/EMPR amendment.
August 2011	Hold PM	It is recommended that the PM be held at a venue in Middelburg to be in line with NEMA
August – September 2011	Availability of DEIR	40 day review period
September 2011	Update C&RR	Includes all issues and comments on the DEIR, as well as issues raised at PM.
October 2011	Availability of Final EIR for review	Notify I&APs of the review period of the FEIR. Make FEIR available to I&APs for 21 days prior to submission to the MDEDET

8 CONSULTATION

The consultation process with key stakeholders, I&APs and landowners that was established during the Scoping Phase will continued in the Impact Phase.

8.1 Communication Strategy focused on the I&AP groupings

Strategies on how the various groupings of I&APs will be engaged and communicated with are outlined below:

Stakeholder Grouping	Communication and Involvement Strategy
Government (National / Provincial / Local)	<ul style="list-style-type: none"> ▪ EIA Notificaton letter ▪ Written reports
Organisations (e.g. SAHRA, NGOs, CBOs etc.)	<ul style="list-style-type: none"> ▪ EIA Notification letter ▪ Written reports
Landowners / residents	<ul style="list-style-type: none"> ▪ EIA Notification letter ▪ Public Meeting ▪ Written reports
General public (interested parties)	<ul style="list-style-type: none"> ▪ EIA Notification letter ▪ Public Meeting ▪ Written reports

8.2 Focused communication and consultation sessions

As per the Scoping Phase, the focused consultation session will include a PM. The following provides a broad outline of what is envisaged with the consultation session.

Sessions	Aim of Communication	I&APs Involved
Impact Phase		
Telephonic communication during the course of the EIA, where necessary	<ul style="list-style-type: none"> ▪ Confirm contact details and representation of I&APs ▪ Respond to communication from I&APs 	<ul style="list-style-type: none"> ▪ All I&APs
Public Meeting	<ul style="list-style-type: none"> ▪ Provide background information to the proposed project ▪ Provide information on the process to be followed ▪ Inform I&APs of their roles and responsibilities regarding participation in the EIA process ▪ Assist I&APs to formulate their comments in a manner that will ensure that they can be afforded due attention in the EIA process 	<ul style="list-style-type: none"> ▪ All I&APs

9 RECORDING AND DOCUMENTING ISSUES

9.1 Database of I&APs

The database of I&APs will be updated throughout the process with I&APs contact details, details of consultations (e.g. telephonic, attendance at PMs and so on) and comments received. This will be undertaken to ensure a comprehensive recording of all communication with the various I&APs and a list of the written and verbal submissions of these I&APs. Maximizer will be used as the database management programme for this proposed project.

- announce the approval of the FSR and acceptance of the PoS for EIA by MDEDET and DEA
- remind I&APs of the proposed project;
- stipulate the process still to be followed in conducting the EIA studies;
- stipulate the EIA-level studies to be undertaken; and
- public participation process to be followed in the impact phase.

7.2 Dry-Run

As per the scoping phase, it is of utmost importance that the proposed project is presented in unity by the team (DTJV, Jones & Wagener, and SiVEST) and it is proposed that the dry-run takes place at least one (1) week prior to the PM.

7.3 Advertisements

7.3.1 Newspaper Advertisements:

The Public Meeting (PM) and availability of the Draft Environmental Impact Assessment Report (DEIR) will be advertised in the following manner during the Impact Phase.

Schedule	Newspaper	Aim	Languages
August 2011: Public Meeting & availability of draft EIR	Local & regional: Witbank News (Eng), Middelburg Observer (Eng&Afr), Sowetan (Eng)	Advertise: <ul style="list-style-type: none"> ▪ Public Meeting ▪ Availability of draft EIR 	English

7.4 Meetings

One (1) Public Meeting will be held during the Impact Phase.

The Public Meeting (PM) is to take place in a centralised venue in Middelburg in order to create a convenient and accessible opportunity to engage with members of the local community. It will be widely advertised (newspaper advertisements, and notice boards). The aim of the meeting will be to provide I&APs with more information regarding the proposed project, findings from the DEIR and to create a platform where issues, comments and concerns can be discussed with the project team and client in detail.

The public participation process and general project information will be on display in the form of maps, drawings, sketches etc. It is therefore important that representatives of the project proponent and environmental consultants attend the PM to answer technical queries.

All meetings will be minuted and the minutes will be distributed to those who attended the meeting and submitted apologies. These will be included in the relevant project reports.

Issues raised during the PM will be included into the C&RR, which would be attached to the Final EIR.

Date	Activity	Notes
	&Estate Agents <ul style="list-style-type: none"> ▪ Interested parties from all sectors of society 	
Announcement phase (after MDEDET Ref Number received)		
February 2011	Compilation of: <ul style="list-style-type: none"> ▪ BID ▪ Registration & Comment Form ▪ Invitation letter to be involved in the public participation process 	Background Information Document (BID) to be compiled to give purpose & overview of project and public participation process to be followed during Scoping Phase. Translation of BID into Afrikaans as, if required.
	Place EIA process advertisement in regional and local newspapers.	Announcing the commencement of the EIA to the broader public.
	Sending of BID, Invitation Letter and Registration and Comment Form.	Printing and sending of documents to I&APs currently on project database. Requesting I&APs to become part of PP process and requesting information of other possibly affected landowners, CBOs, NGOs, etc.
	Advertise PM and availability of draft Scoping Report	Inviting the public to the PM and notify availability of draft Scoping Report.
March 2011	Hold Public Meeting	To be held at in a centrally located venue.
14 March –19 April 2011	Availability of draft Scoping Report for public review and comment	40 day review period
April – May 2011	Availability of FSR for review	Notify I&APs of the review period of the FSR. Make FSR available to I&APs prior to submission to MDEDET. 21 day comment period
May 2011	Notification of FSR submitted to MDEDET	To all registered I&APs
June / July 2011	Notification of MDEDET decision on FSR	To all registered I&APs

NOTES:

The assumptions for above-mentioned dates are based on:

- Issuing of MDEDET EIA reference number
- Availability of stakeholders
- Availability of venues
- Public Holidays
- Jones & Wagener compilation of reports
- DTJV review of reports

7 PROPOSED PLAN OF ACTION FOR THE PUBLIC PARTICIPATION PROCESS: IMPACT PHASE

7.1 EIA Notification Letter

An EIA notification letter will be compiled and distributed as soon as the Final Scoping Report has been accepted and the Plan of Study for EIA has been approved by the Mpumalanga Department of Economic Development, Environment and Tourism (MDEDET). The EIA letter will be compiled in English. The aim of the letter will be to:

5.4 Correspondence with I&APs

Comments / concerns received from I&APs, other than at meetings, will be acknowledged, in writing, to provide the I&AP the opportunity to verify that the comment(s) / concern(s) raised will be correctly captured in the C&RR.

5.5 Communication with the media

The success of communicating with the media will depend on the nature of the issues at hand, as well as the views of the media and I&APs with regard to the proposed project. It is expected that there would be more interest from the media at specific stages of the project, such as at the onset of the project, during public events and on finalisation of the project reports.

The following communication with the media will be followed and will be in line with DTJV's Communication Strategy Plan:

- All technical questions to be directed to the DTJV;
- All EIA related questions, including process and timelines, to be directed to Jones & Wagener;
- Information requested regarding public participation process i.e. meeting and availability of reports will be responded to by SiVEST and the DTJV and Jones & Wagener will be copied into the responses.

6 TIMEFRAMES: SCOPING PHASE

The following timetable provides an outline of when the communication efforts will take place. The first advert to announce the project plays a key role in the public participation plan. In addition, the PM is required to be advertised (in terms of the Regulations) and the advert must appear 14 days (10 working days or 14 consecutive days) prior to the PM. This requirement must be adhered to in order to ensure a robust and defensible process.

The public participation activities and proposed timeframes for the Scoping Phase are detailed in the table below. The dates will remain draft dates until the public participation process is officially launched.

Date	Activity	Notes
Identification Phase		
January 2011	Identify and Consultation: <ul style="list-style-type: none"> ▪ National & Provincial Government ▪ Steve Tshwete Local Municipality ▪ Service Providers (Telkom, etc) ▪ Government Structures / NGOs (including environmental) ▪ Agricultural Bodies ▪ Community based organisations ▪ Affected landowners (as far as possible) ▪ Property Developers 	Compile electronic database of interested and affected parties. Update of database, ongoing throughout Scoping Phase. Plan the Public Meeting.

Stakeholder Grouping	Communication and Involvement Strategy
Landowners / residents	<ul style="list-style-type: none"> ▪ Written reports ▪ Advertisements ▪ BID ▪ Public Meeting ▪ Written reports
General public (interested parties)	<ul style="list-style-type: none"> ▪ Advertisements ▪ BID ▪ Public Meeting ▪ Written reports

4.3 Focused communication and consultation sessions

The focused consultation sessions will include a PM. The following provides a broad outline of what is envisaged with each focused consultation session.

Sessions	Aim of Communication	I&APs Involved
Scoping Phase		
Public Meeting	<ul style="list-style-type: none"> ▪ Provide background information to the proposed project ▪ Provide information on the process to be followed ▪ Inform I&APs of their roles and responsibilities regarding participation in the EIA process ▪ Assist I&APs to formulate their comments in a manner that will ensure that they can be afforded due attention in the EIA process 	<ul style="list-style-type: none"> ▪ All I&APs

5 RECORDING AND DOCUMENTING ISSUES

5.1 Database of I&APs

The database of I&APs will be updated throughout the process with the I&APs contact details, details of consultations (e.g. one-on-one consultation, telephonic interviews, attendance at PM and so on) and comments received. This will be undertaken to ensure a comprehensive recording of all communication with the various I&APs and a list of the written and verbal submissions of these I&APs. Maximizer will be used as the database management programme for this proposed project.

It is important to note that it is I&APs privilege to withheld contact details but the PP team will try and obtain full contact details as far as possible.

5.2 Comments and Responses Report (C&RR)

Issues and concerns raised during the public participation process will be compiled into a Comments and Responses Report (C&RR). Information from the public participation process held during the Scoping phase will be incorporated into the Environmental Scoping Report, and will form the basis of the social scoping study. All issues, comments and concerns raised during the EIA phase of the project will be incorporated as part of the Environmental Impact Report (EIR).

5.3 Minutes of meetings

All meetings will be minuted and the minutes will be distributed to those who attended the meetings and submitted apologies. The minutes will also be included in the relevant project reports.

4 CONSULTATION

4.1 Identification of and Consultation with Key Stakeholders

Various interested parties will be contacted as part of the public participation process, including:

- Relevant National, provincial and local government departments;
- Steve Tshwete Local Municipality;
- Nkangala District Municipality
- Agricultural organisations, including landowners and neighbouring landowners;
- Regional and Local media;
- Industry and mining (e.g. Chamber of Commerce & Industries, where identified);
- Transport organisations (e.g. Roads Agency);
- Servitude related institutions (e.g. Transnet, Eskom, Telkom, etc);
- Environmental bodies, both as authorities and NGOs;
- Water related organisations (i.e. Olifants River Forum); and
- Community based organisations (CBOs, development bodies, etc).

4.1.1 Landowners

Identification of landowners will take place through existing contacts and databases, responses to newspaper advertisements, networking and a proactive process to identify landowners within the study area.

The process envisaged to identify possibly affected landowners adjacent to the two proposed sites and downstream, will be as follows:

- Liaison with the two agricultural bodies in South Africa, i.e. Agri SA and the Transvaal Agricultural Union (Chairpersons of the local unions / associations); Liaison with the relevant Local Authority – Environmental and Land-use Planning Divisions (SiVEST have subsequently discovered that there is no local union, but Agri Mpumalanga has been informed of the project);
- Telephone directories; and
- Referrals from identified landowners regarding his/her/their neighbour.

All landowners' information (including contact details), together with dates and details of consultations and a record of all issues raised will be recorded within a comprehensive database of affected landowners (and occupiers where relevant). This database will be updated on an on-going basis throughout the project process, and will act as a record of the communication/involvement process.

4.2 Communication Strategy focused on the I&AP groupings

Strategies on how the various groupings of I&APs will be engaged and communicated with is outlined below:

Stakeholder Grouping	Communication and Involvement Strategy
Government (National / Provincial / Local)	<ul style="list-style-type: none">▪ BID▪ Public Meeting▪ Written reports
Organisations (e.g. SAHRA, NGOs, CBOs etc.)	<ul style="list-style-type: none">▪ Advertisements▪ BID▪ Public Meeting

Schedule	Newspaper	Aim	Languages
Scoping Phase			
At the start of the EIA process, following receipt of MDEDET Reference Number (February 2011)	Local & regional: Witbank News (Eng), Middelburg Observer (Eng&Afr),Sowetan (Eng)	Advertise: <ul style="list-style-type: none"> ▪ Start of EIA ▪ Invite I&APs to register 	Afrikaans English
Public Meeting & availability of Draft Scoping Report (March 2011)	Scoping Phase: Witbank News (Eng), Middelburg Observer (Eng&Afr),Sowetan (Eng)	Advertise: <ul style="list-style-type: none"> ▪ Public Meeting ▪ Availability of Draft Scoping Report 	Afrikaans English

3.3 Site Notices

Site notices (EIA process advert) will be erected at the two proposed sites in terms of the NEMA and various A3 black & white copies will be put up at public places i.e. libraries, cafés frequented by community members, etc., after receipt of the MDEDET reference number.

3.4 Invitations to meetings

All the I&APs registered on the database will be invited to attend the PM during the Scoping Phase of the project.

Consultation with the community leader(s) of Naledi Village is important.

3.5 Dry-Run

It is of utmost importance that the proposed project is presented in unity by the team (DTJV, Jones & Wagener and SiVEST) and it is recommended that the dry-run takes place at least one (1) week prior to the Public Meeting (PM).

3.6 Meetings

It is proposed that one (1) PM be held during the Scoping Phase. The aim of the PM will be to present the proposed project to I&APs and create a platform where issues, comments and concerns can be discussed with the project team and client in detail. The meeting will be widely advertised (newspaper advertisements and notice boards).

The public participation process and general project information will be on display in the form of maps, drawings, sketches etc. It is therefore important that representatives of the project proponent and environmental consultants attend the PM to answer technical queries.

All meetings will be minuted and the minutes will be distributed to those who attended the meeting and submitted apologies. These will be included in the relevant project reports.

Issues raised during the PM will be included into the Comments and Response Report (C&RR), which would be attached to the Final Scoping Report that will be submitted to the decision-making authority and commenting authorities.

- inform and improve decision making;
- foster trust and co-operation;
- generate a sense of joint responsibility in ownership of the environment;
- assist in the review and monitoring of activities that may negatively impact on the environment; and
- verify that all I&AP issues have been captured

Issues and concerns are identified and submitted by interested and/or Affected Parties (I&APs), this includes the authorities, the EIA technical specialists and the Applicant (Douglas Tavistock Joint Venture (DTJV)). These issues and concerns are then captured in a Draft Scoping Report (DSR). The Scoping Report will include a description of the project, a description of the alternatives considered, a desktop investigation (minimum) of the environment and a description of how the environment may be affected, the environmental issues that have been identified, and a description of the public participation process that has been followed, including a list of the registered I&APs and their comments and the Plan of Study for the EIA.

2.2 The Environmental Impact Assessment Phase

The EIA phase will allow I&APs to:

- verify that their issues have been considered and assessed by the environmental specialists and technical team, and
- comment on the findings of the EIA.

Detailed specialist studies will be undertaken to investigate the issues of concern identified in the Scoping Report by assessing the potential positive and negative impacts and recommending ways to maximise potential positive impacts and minimise negative impacts of the proposed Middelburg Water Reclamation Project (MWRP).

3 PROPOSED PLAN OF ACTION FOR THE PUBLIC PARTICIPATION PROCESS: SCOPING PHASE

3.1 Background Information Document

A Background Information Document (BID) will be compiled. The BID will be compiled in English and Afrikaans. The aim of the BID will be to provide a brief outline of all the components of the proposed project, basic technical information, provide I&APs with a map of the study area, provide preliminary details regarding the EIA, and explain how I&APs can become involved in the project. The BID will be distributed to all identified stakeholders and I&APs together with a comment sheet inviting I&APs to submit details of any issues and concerns they might have regarding the proposed project.

3.2 Advertisements

3.2.1 Newspaper Advertisements:

The EIA process will be advertised in the following manner during the Scoping Phase:

1 INTRODUCTION

An extensive Public Participation Process is proposed to be undertaken in terms of the Environmental Impact Assessment (EIA) Regulations, as promulgated on 18 June 2010 and came into effect on 2 August 2010. The methodology for undertaking this process is outlined below. The EIA Regulations have provided specific guidelines to facilitate the Public Participation Process and these will be closely adhered to in order to comply with the National Environmental Management Act, 1998 (NEMA) and the associated regulations.

2 OBJECTIVES OF PUBLIC PARTICIPATION

The Public Participation Process is designed to provide sufficient and accessible information to Interested and Affected Parties (I&APs) in an objective manner. The principles used world-wide to characterise and measure a thorough and legitimate Public Participation Process and which is proposed to be applied in this process, are noted below:

- Consultation is inclusive (consultation takes place with all sectors of society, and affords a broad range of I&APs the opportunity to become involved).
- Information is sufficient to allow meaningful contributions, and is accessible (in a language that I&APs can understand and written in a non-technical way).
- Information is presented to I&APs in various ways (e.g. by way of discussion documents, meetings, small-group discussions, printed and broadcast media).
- Grassroots people are assisted to understand the concepts involved.
- Sufficient time is allowed for comment, but I&APs' time is not wasted on options that are no longer viable.
- There are various opportunities for comment, at various stages in the process.
- There are various ways for I&APs to comment (written submissions, comment sheets, Public Meeting (PM), personal contact with members of the EIA team).
- Stakeholders have ample opportunity to exchange information and viewpoints (e.g. at public and other meetings).
- Stakeholders are supplied with information that assists them to understand their roles and responsibilities in the process (e.g. time agreed upon by the authorities by which comment should be provided, at which points decisions will be made about what aspects and by whom, and how I&AP contributions will be taken up in the EIA).

It needs to be noted that although the public consultation process is a continuous process, it is divided into two main phases:

2.1 The Scoping Phase

The Scoping phase will allow I&APs to:

- raise awareness, educate and increase understanding between stakeholders (a two way exchange of information);
- assist in identifying the key issues of concern that need to be considered;
- obtain a balanced perspective on the key issues;
- identify sources of information and the knowledge of local and other stakeholders;
- learn from the local knowledge and understanding of the environment;
- identify reasonable alternatives;
- manage and minimise conflict through creative solutions to problems or deadlocks;



9.5	COMMUNICATION WITH THE MEDIA.....	10
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MIDDELBURG WATER RECLAMATION PROJECT

PUBLIC PARTICIPATION PLAN

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2.2 THE ENVIRONMENTAL IMPACT ASSESSMENT PHASE	2
3 PROPOSED PLAN OF ACTION FOR THE PUBLIC PARTICIPATION PROCESS: SCOPING PHASE	2
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7 PROPOSED PLAN OF ACTION FOR THE PUBLIC PARTICIPATION PROCESS: IMPACTPHASE	7
7.1 EIA NOTIFICATION LETTER.....	7
7.2 DRY-RUN.....	8
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SIVEST

JONES & WAGENER

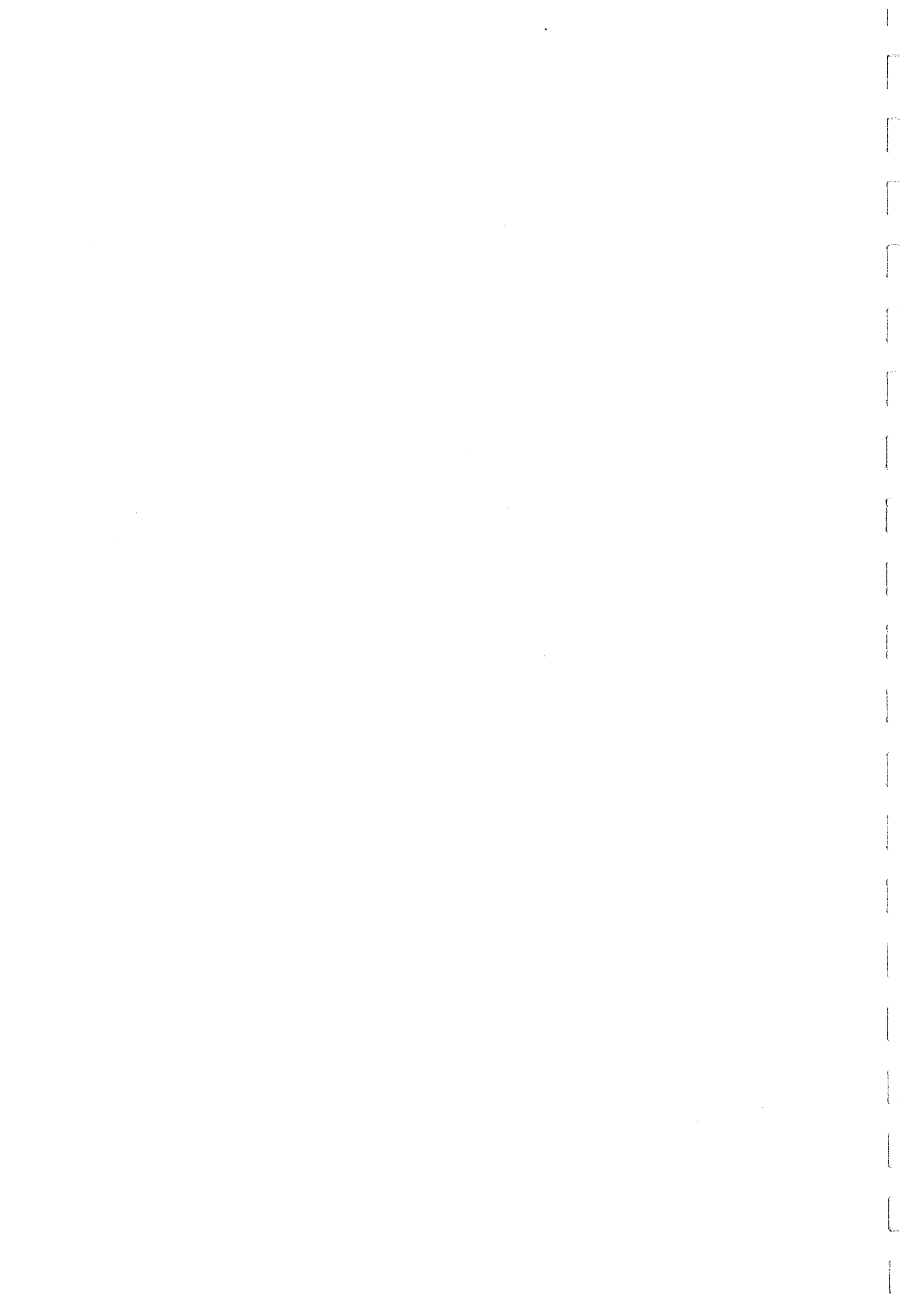
Middelburg Water Reclamation Project

Public Participation Plan

Issue Date: 18 April 2011
Revision No.: 2
Project No.: B478 (9529)



B.11 Public Participation Plan



Issue/Comment	Raised By	Response
Questioned when it is anticipated that the plant will start operating.	Grobler, Robert Director: Black Wattle	This will be clarified in the next phase of the EIA. Steve Brown: Project Director DTJV
Questioned why providing water to the eMalahleni Local Municipality has not been considered as an alternative to releasing the water back into the spruit.	Kleynhans, Jaco Owner: JKC	The initial requirement of the project is to manage the mine's surplus water. However, there is nothing hindering the DTJV from negotiating some kind of arrangement in this regard in the future. Steve Brown: Project Director DTJV
Questioned what will happen to the water treatment plant after 20 years, in the event that BHP Billiton may leave South Africa.		The treatment of water can carry on for significantly longer than 20 years and the Joint Venture will fulfil the legal obligations going forward. Steve Brown: Project Director DTJV
Questioned when the construction phase of the project will commence.	Mthimunye, Josiah NUM Representative, Middelburg Colliery	It will depend on the EIA process, waste and water use license as no construction can start until an Environmental Authorisation has been granted, the appeal process has come to an end and licenses have been received. If there are no delays, the EIA should be completed by January 2012 and the construction phase will commence in February/March 2012. Wendy Mey: Process Manager DTJV
4. General Comments / Issues		
Noted that Black Wattle also needs to investigate the option of treating waste water but at a much smaller scale and it is their understanding that portable treatment plants are available. Requested whether the project can provide them with a list of companies that could be contacted.	Grobler, Robert Director: Black Wattle	A list will be provided of companies that can be contacted in this regard. Wendy Mey: Process Manager DTJV Post-meeting note: The following companies are recommended as potential suppliers of mobile water treatment facilities: Keyplan, Water Solutions South Africa (WSSA) and Veolia Water Solutions & Technologies South Africa. Wendy Mey: Process Manager DTJV
Commented that he supports the project proposed by the DTJV. Middelburg has a lot of water in underground workings and he hopes that this project will also treat this water in the future.		Comment noted. Nicolene Venter: SIVEST
Noted that he fully supports this proposed project and he will let people know about it.	Kleynhans, Jaco Owner: JKC	Comment noted. Nicolene Venter: SIVEST
Noted that the Union does not have any problems with the project and do not want to see the EIA process or project delayed.	Mthimunye, Josiah NUM Representative, Middelburg Colliery	Comment noted. Nicolene Venter: SIVEST

Issue/Comment	Raised By	Response
1. Public Participation Related Commercial Issues		
Noted that consultation is very important and the project team should remain in contact with Naledi Village through the Union and the Councillor.	Mthimunye, Josiah NUM Representative, Middelburg Colliery	Request and comment noted. Nicolene Venter: SIVEST
Questioned when the next meeting will be held.		The date of the next meeting will depend on how long the MDEDET will take to accept the FSR and approve the Plan of Study for the EIA. However, the meeting will take place in the Impact Assessment Phase of the project which is anticipated to be towards the second half of 2011. Jacqui Hex: Jones and Wagner
2. Technical Comments/ Issues		
Questioned if there is any intention to use the plant to treat water from other sources.	Grobler, Robert Director: Black Wattle	The initial intention is only to treat water from Middelburg Mines. However, the opportunity to do this may be investigated in the future. Steve Brown: Project Director DTJV
Questioned if the DTJV intends to pump water from the old mine, known as Vaalbank Colliery, which is located between Black Wattle and the northern boundary of Middelburg Mines. Black Wattle shares a boundary with this old mine and as a result they get water seepage into their workings. Although this mine is abandoned Middelburg Mines are still responsible for it.		The DTJV does not specifically intend to pump water from that area. They will examine all their mineral mining authorisations and take water from where they have to in order to comply with their legal requirements. Steve Brown: Project Director DTJV
Requested for the distance between the R575 and the proposed pipeline to be clarified where the R575 passes Naledi Village.	Mthimunye, Josiah NUM Representative, Middelburg Colliery	Responded that this will be determined and feedback provided in the draft minutes. Jacqui Hex: Jones and Wagner Post-meeting note: The MWR plant-Option 1 is proposed to be located adjacent to the R575. The proposed pipeline to the north of the proposed MWR plant is approximately 500 metres from Naledi Village.
3. Project Related Comments/ Issues		
Questioned if the DTJV has considered storing the waste materials in the old underground workings.	Ferreira, Dan Owner: Dan Ferreira Technical Services	Storing waste in old underground workings has been investigated. However, there are a number of complications associated with it, such as legal requirements and the long term sustainability thereof. The option of storing waste materials in underground workings will not be included in the EIA. However, the water treatment plant will operate for a very long time and this may be a long term possibility. Steve Brown: Project Director DTJV

**ENVIRONMENTAL IMPACT ASSESSMENT FOR THE DOUGLAS TAVISTOCK JOINT VENTURE (DTJV)
PROPOSED MIDDELSBURG WATER RECLAMATION PROJECT**

**DISCUSSION DOCUMENT: PUBLIC MEETING – BUSINESS AUDIENCE / MIDDLE CLASS
Saturday, 12 March 2011**

TABLE OF CONTENT

1.	Public Participation Related Comments / Issues	2
2.	Technical Comments / Issues	2
3.	Project Related Comments / Issues	2
4.	General Comments / Issues	3

ABBREVIATIONS:

DSR	Draft Scoping Report
DTJV	Douglas Tavistock Joint Venture
EIA	Environmental Impact Assessment
FSR	Final Scoping Report
MDEDET	Mpumalanga Department of Economic Development, Environment and Tourism
MWR	Middelburg Water Reclamation
NUM	National Union of Mine Workers
PM	Public Meeting

Annexure C

DISCUSSION SESSION AND QUESTIONS

Way Forward: Scoping Phase

Way Forward: EIA Phase

Who should you contact?

SIVEST

Environmental Division
 61 Wessels Road, Blyvoor, 2125
 P.O. Box 207, Blyvoor, 2120

Contact persons: Nicolaas Venter or Andrea Gibb

Phone: +27 11 795 5905
 Fax: +27 11 605 7272
 E-mail: andreas@siwest.co.za
 Website: www.siwest.co.za

Questions and discussions

Your Role as Interested & Affected Party

- Register yourself on the project database.
- Inform any other parties about the project.
- Submit your comments in writing within the timeframes
- Your inputs are important to us!

Registration Form

Comment Form

Availability of public documents

- **Lodged, from 15 March 2011, at**
 - Public Libraries (Gerard Sekoto; Mhluzi & Eastdene); Naledi Village & Middelburg Mines
- **Available on the Internet:**
 - <http://www.jaws.co.za/public-review-documents/services/middelburg-water-reclamation-project>
- **Available from SiVest**

Agenda

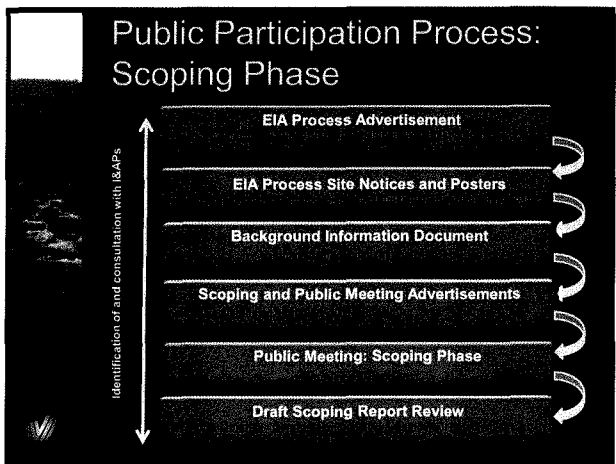
- Public participation process

Public Participation

Public Participation Process

Public participation is:

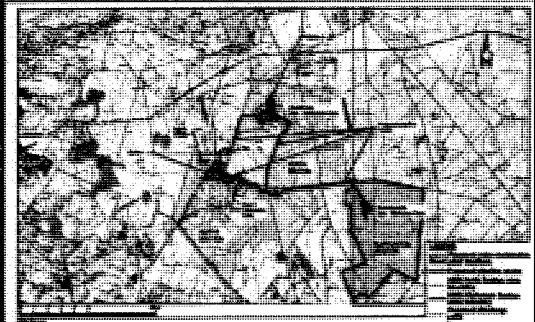
- A process leading to a joint effort by stakeholders, technical specialists, the authorities and the applicant who work together to produce better decisions than if they have acted independently



Criteria for assessing alternatives

- Bio-physical constraints
- Social constraints
- Technical constraints

Alternative sites & pipelines

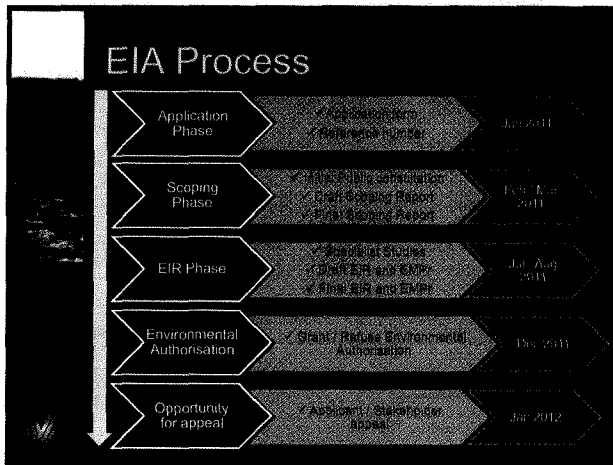


Potential Impacts

Potential Impacts	
Climate	EMAs
Aquatic Ecology	Surface & Groundwater
Geology	Terrestrial Ecology
Heritage Resources	Traffic
Noise	Visual
Safety	Wildlife
Security	

Specialist Studies

- Air quality impact assessment
- Biodiversity (aquatic, wetlands, fauna & flora)
- Geohydrological investigation
- Geotechnical Investigation
- Heritage impact assessment
- Hydraulic impact assessment (Spookspruit)
- Noise impact assessment
- Socio-economic impact assessment
- Traffic impact assessment
- Water quality assessment (Spookspruit and Loskop Dam)



- ### Purpose of the Scoping Phase
- Identify alternatives and potential impacts requiring more detailed investigation in the EIR phase
 - Based on:
 - Literature review
 - Professional input (technical and environmental)
 - Public input
 - Forms basis for Plan of Study for EIA

Identification of Alternatives

Alternative:
 'a possible course of action, in place of another, that would meet the same purpose and need'

Ref: DEAT - Integrated Environmental Management Information Series, 2004

- ### Alternatives
- Activity Alternatives
 - As discussed in the DTJV presentation
 - Location Alternatives
 - Different sites for MWRP
 - Different corridors for pipelines

NEM:WA Requirements

NEM:WA Waste facility license

- Environmental Assessment for the following activities:
 - Affected mine water stored in holding dams
 - Treatment of affected water
 - Disposal of gypsum waste
 - Construction of holding dams and waste disposal facilities

NWA Requirements

NWA IWULA IWWMP

- Integrated Water Use Licence (IWUL) for MWRP
- Existing IWULs of mines require amendments.
- MWRP water use licences for:
 - Storage of impacted water in the balancing dam before the treatment plant
 - Watercourse crossings of pipelines
 - Disposal of gypsum waste in an engineered waste disposal facility
 - Discharge treated water into the Spookspruit.

MPRDA Requirements

MPRDA Amended EMPR

- Amendments to MMS' specific EMPRs are envisaged to reflect water transfer to the MWR Water Treatment Plant.

Purpose of the EIA process

- To satisfy legislative requirements
- To identify potential environmental impacts (social and biophysical) & determine their likely significance
- To allow for public involvement
- To inform DTJV's decision-making
- To inform Environmental Authority's decision

Agenda

- Environmental authorisations

Environmental Authorisations

Environmental Legislation

Public Participation

NEMA	Scoping report EIA
NEM:WA	Waste facility license
NWA	IWULA IWWMP
MPRDA	Amended EMPR
NHRA	Heritage impact assessment

NEMA Requirements

Scoping report
EIA

- EIA for listed activities:
 - Water treatment plant
 - Pipelines transferring affected water
 - Holding dams storing affected water
 - Chemicals stored on site
 - Pipelines crossing streams
 - Access road
 - Discharge of treated water
 - Disposal of waste
 - Use of undeveloped, vacant land
 - Borrow pits

Project Description

Phase 1: 15ML/day
Phase 2: 30ML/day

Impacted Water
Goedemang

Holding dam

Impacted Water
Kloofontein

Impacted Water
Hartbeesfontein

Treated Water

Project Locality

Scale 1:50000

PROJECT LOCALITY

Legend

Scale bar

Waste Generated

Two waste types will be generated, which require management, namely:

- Primary gypsum waste. Generation rate will be approximately 20-30 tons/day @ 15 ML/day, and
- Secondary gypsum cake. Generation rate will be approximately 70-80 tons/day @ 15 ML/day

Distribution

- Treated water to be discharged into Spookspruit
- Quality will meet current Resource Water Quality Objectives for Spookspruit set by Department of Water Affairs (DWA)

Constituent/Variable	Concentration
Chloride (Cl)	≤ 40 mg/l
Total Dissolved Solids (TDS)	≤ 650 mg/l
Sulfate (SO ₄)	≤ 450 mg/l
Sodium (Na)	≤ 70 mg/l
Calcium (Ca)	≤ 180 mg/l
Magnesium (Mg)	≤ 70 mg/l
Aluminum (Al)	≤ 0.02 mg/l
Iron (Fe)	≤ 1.0 mg/l
Manganese (Mn)	≤ 0.4 mg/l

Independence

- EIA regulations requirement
- DTJV appointed Jones & Wagener as the independent Environmental Assessment Practitioner
- Jones & Wagener appointed SiVest to be independent Public Participation Practitioner

Rationale of the Project

- Impacted water generated will exceed re-use and storage capacity at Middelburg Mine Services (MMS)
- Commitment to environmental responsibility
- Legal compliance

Project Background

Mine Water Management

Minimise

Use

Store

Treat

Conduct of Meeting

- Work through facilitator
- Focus on issues relating to this project's EIA
- Equal participation
- Identify yourselves
- Cell phone etiquette
- Language of choice
- Questions at end

Agenda

- Project background



The Proponent

Partnership

- Joint Venture between BHP Billiton Energy Coal South Africa & Tavistock Collieries (DTJV)
- Middelburg Water Reclamation Project (MWRP)



Agenda

- Objectives of the meeting





Objectives of the Meeting

- Present the proposed project
- Obtain comments and inputs from stakeholders on the proposed project
- Obtain suggestions for the planning, scoping and public participation processes ahead





Objectives of the Meeting

- **We are here to:**
 - ⇒ SHARE information
 - ⇒ OBTAIN comments



Agenda

- Conduct of meeting



Environmental Impact Assessment (Scoping Phase)

Proposed Middelburg
Water Reclamation Project

1st Public Meeting
12 March 2011

Jones & Wagener
Consulting Civil Engineers

Logistics

- Emergency evacuation procedure
- Recording of meeting
- Venue arrangements
 - Rest rooms
 - Coffee and tea
 - No refreshments in auditorium
 - Designated smoking areas

Agenda

- | | |
|-------|--|
| 10:00 | Welcome and introductions
Objectives of the meeting
Conduct of meeting |
| 10:10 | Project background |
| 10:20 | Environmental authorisations |
| 10:50 | Public participation process |
| 11:00 | Questions and discussions |

Welcome and Introductions

- | | |
|-------------------|------------------------------|
| • Steve Brown | - DTJV |
| • Wendy Mey | - DTJV |
| • Lindie Moore | - DTJV |
| • Piet Wessels | - DTJV |
| • Jacqui Hex | - Jones & Wagener |
| • Nicolene Venter | - SiVest |
| • Andrea Gibb | - SiVest |
| • Moses Mahlangu | - Margen Industrial Services |

Annexure B

COPY OF PRESENTATION

Attendance Record: Public Meeting, Saturday 12 March 2011

Name:	Position	Company
Botha, Lyness	Project Administrator	DTJV
Brown, Steve	Project Director	DTJV
Ferreira, Dan	Director	Dan Ferreira Technical Services
Gerber, Sharon	HSEC Specialist	DTJV
Grobler, Robert	Director	Black Wattle
Kleynhans, Jaco	Director	JKC
Koen, Mike	Project Manager	DTJV
Mahao, Tshepo		BHPBilliton
Mahlangu, Jessy	Councillor	Naledi Village
Mey, Wendy	Process Manager	DTJV
Moore, Lindie	Env Specialist	DTJV
Moore, Fraser	Inspector	TUV
Motloi, Lehlohonolo		BHPBilliton
Motloi, Tshedi		BHPBilliton
Mthimunye, Josiah	Representative: NUM	Middelburg Colliery
Wessels, Piet	Environmental Manager	DTJV
Williams, Michelle	Project Leader	DTJV
Totals		

Annexure A

ATTENDANCE RECORD

5 ENVIRONMENTAL IMPACT AND PUBLIC PARTICIPATION PROCESS

Jacqui Hex of Jones and Wagener, described the Environmental Authorisation process, including public participation, the process followed during the Scoping Phase and outlined the legal requirements associated with the proposed Middelburg Water Reclamation (MWR) Project.

The need and requirements for assessing alternatives was explained and the potential impacts and the required specialist studies proposed were pointed out. The public participation process was also explained in detail and everyone present was notified of how they can become involved in the project as an Interested and/or Affected Party.

Refer to Annexure B (Presentation) for further information.

6 QUESTIONS AND DISCUSSION

At the end of the presentation everyone present was encouraged to ask questions and raise comments regarding the proposed project.

Please refer to Annexure C for the comments and responses raised at the meeting.

7 CLOSURE AND WAY FORWARD

Jacqui Hex informed the attendees of the way forward for the Scoping and EIA Phases which are as follows:

Scoping Phase:

- Circulate the minutes and presentation from the PM for comment
- Comment on the Draft Scoping Report
- Finalise the Scoping Report
- Submit the Final Scoping Report to the competent authorities [Department of Mineral Resources (DMR) and the Mpumalanga Department of Economic Development, Environment and Tourism (MDEDET)]

EIA Phase:

- Conduct Specialist Studies.
- Compile Environmental Impact Report (EIR)/Environmental Management Programme (EMPr) amendment, Integrated Water Use License Application (IWULA), Integrated Water and Waste Management Plan (IWWMP) and Waste License.
- Announce draft EIR/EMPr amendment report for public review.
- Second Public Meeting.
- Finalise EIR/EMPr amendment, IWULA, IWWMP and Waste License and submit to authorities.
- Announce authorization and licenses.

The meeting was closed at 11h15.

PUBLIC MEETING

Venue: BusMid Auditorium, Walter Sisulu Street, Middelburg
Date: Saturday, 12 March 2011
Time: 10h00

1 WELCOME AND INTRODUCTIONS

Nicolene Venter thanked everyone present for attending the Public Meeting (PM) and requested the project team members to introduce themselves, noting that Jones and Wagener is the independent Environmental Assessment Practitioner (EAP) undertaking the Environmental Impact Assessment (EIA) process, SiVEST has been appointed as the Public Participation Practitioner for the proposed project and that the DTJV is the proponent.

Permission was requested and subsequently granted by the attendees, to record the meeting for minute taking purposes and should there be any queries regarding a comment / question / concern raised, it can be verified.

2 MEETING ATTENDEES

Formal apologies were received from the following representatives:

- Lerato Bapela – Water Resource Planning Systems
- Mariette Liefferink – Federation for a Sustainable Environment
- Charity Mthimunye – Mpumalanga Department of Economic Development, Environment and Tourism
- Koos Pretorius – Federation for a Sustainable Environment
- Christoff Prinsloo – Kanhym Landgoed

A copy of the Attendance Record is attached as Annexure A.

3 OBJECTIVE OF THE MEETING

Nicolene Venter informed the attendees that the objective of the PM was to:

- present the proposed project;
- provide attendees with the opportunity to raise comments and provide their input; and
- obtain suggestions for the planning, scoping and public participation processes ahead.

4 PROJECT BACKGROUND

Steve Brown of the DTJV introduced the need for the proposed project, gave a brief overview regarding the DTJV partnership and the independence of the EIA team. He thereafter handed over to Wendy Mey of the DTJV who presented the project background, the proposed sites identified for the water reclamation plant and the various water pipeline routes. Refer to Annexure B (Presentation) for further information.

TABLE OF CONTENTS

1	WELCOME AND INTRODUCTIONS.....	2
2	MEETING ATTENDEES	2
3	OBJECTIVE OF THE MEETING	2
4	PROJECT BACKGROUND	2
5	ENVIRONMENTAL IMPACT AND PUBLIC PARTICIPATION PROCESS	3
6	QUESTIONS AND DISCUSSION	3
7	CLOSURE AND WAY FORWARD.....	3

It is important to note that the Minutes are not verbatim and any comments and questions raised by the technical specialists and the project proponent are not included in the discussion document.

SiVEST Environmental (Pty) Ltd**Name:** Nicolene Venter/Andrea Gibb**Address:** PO Box 2921
51 Wessels Road
Rivonia 2128**Tel:** 011 798 0600**Fax:** 011 803 7272**E-mail:** andreag@sivest.co.za

**Environmental Impact Assessment for
the Douglas Tavistock Joint Venture's
(DTJV) Proposed Middelburg Water
Reclamation Project**

**FINAL MINUTES OF THE
PUBLIC MEETING**

**Held on
Saturday, 12 March 2011 at 10h00
BusMid Auditorium, Middelburg**

**Final Minutes prepared by:
Andrea Gibb**



B.10 Minutes from Public Meeting – Scoping Phase

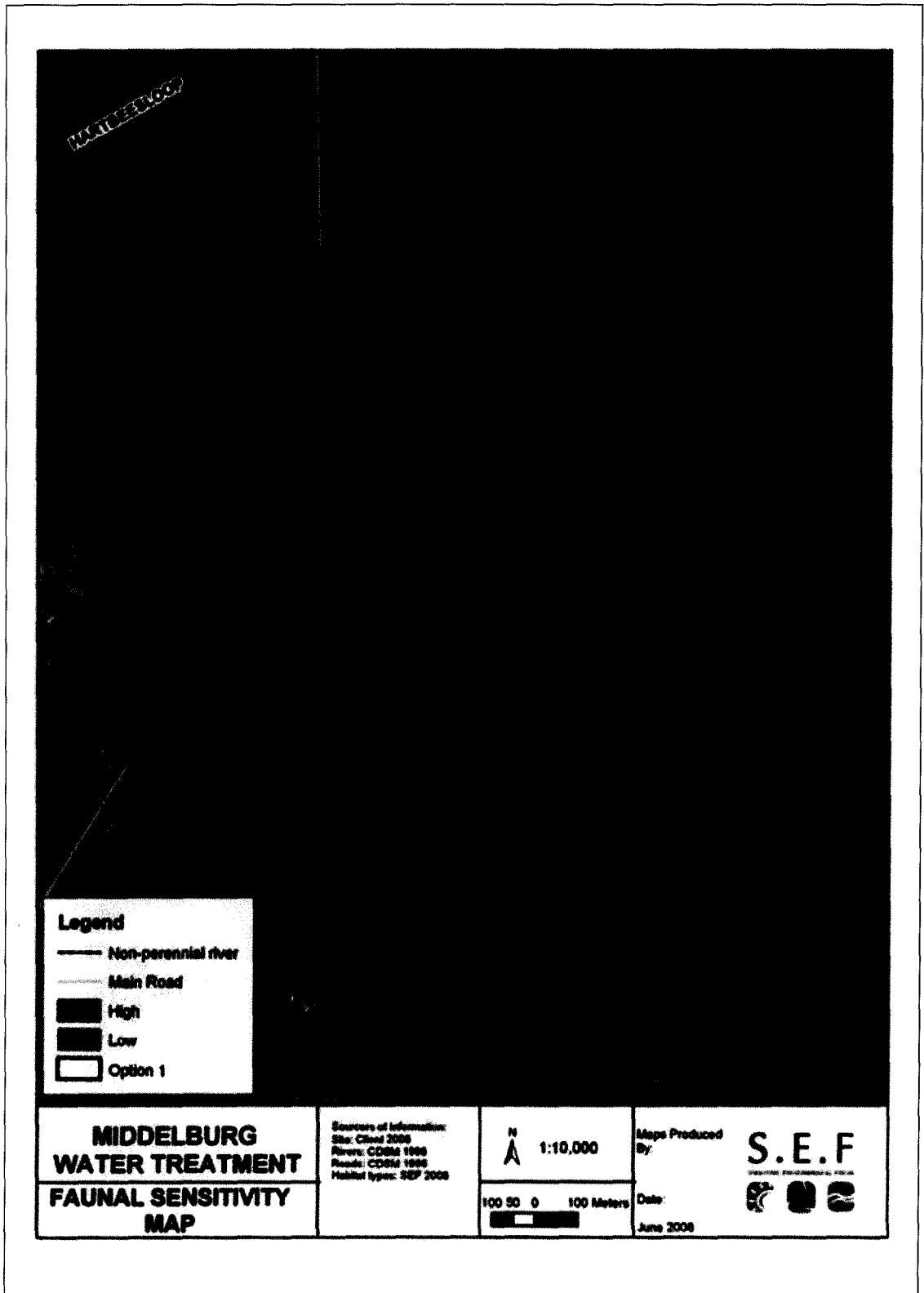


Figure B2.7 (c): Faunal Sensitivity Map: (Source: SEF, 2008b)

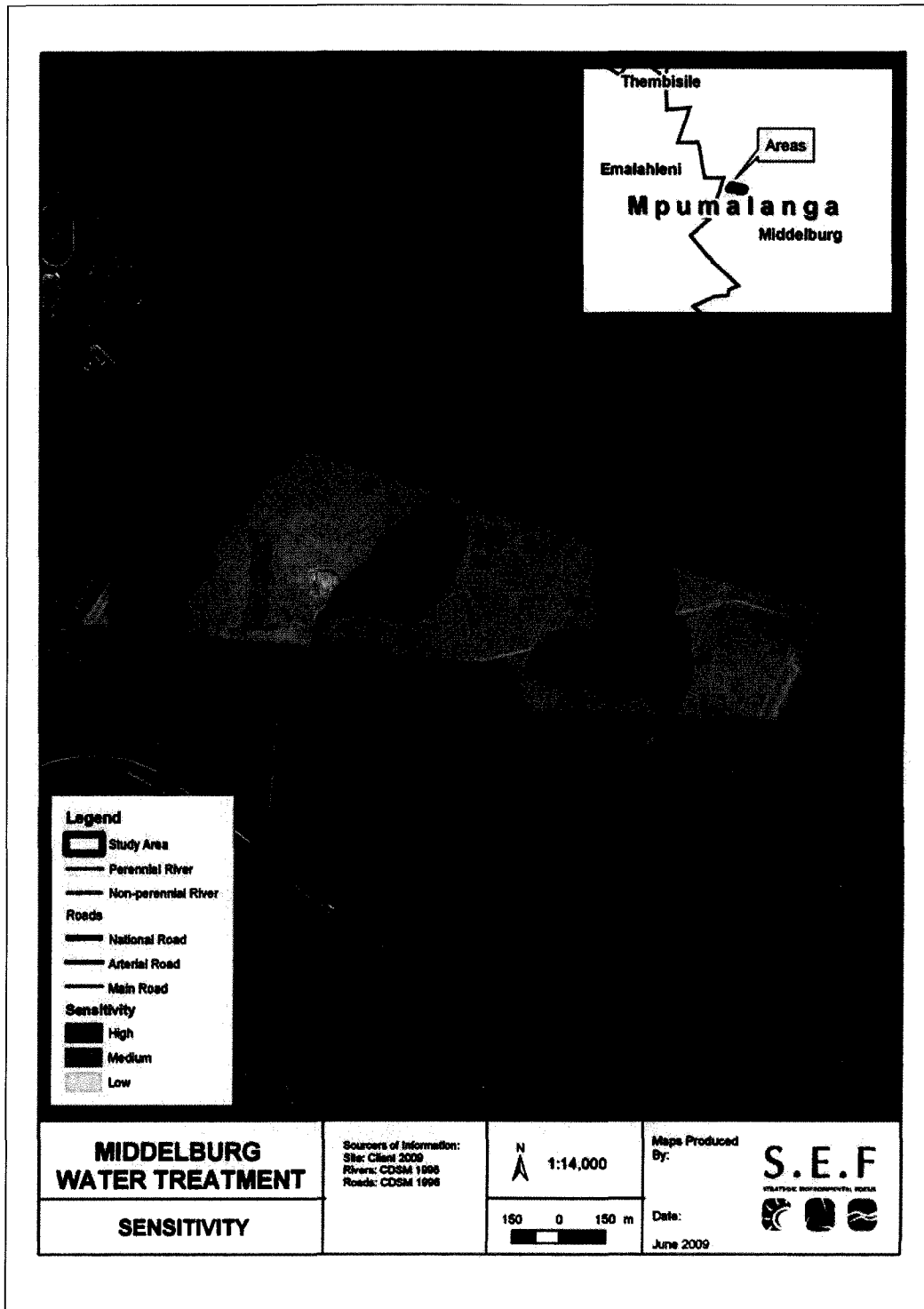


Figure B2.7 (d): Sensitivity Map of Extended Area (Source: SEF, 2009)

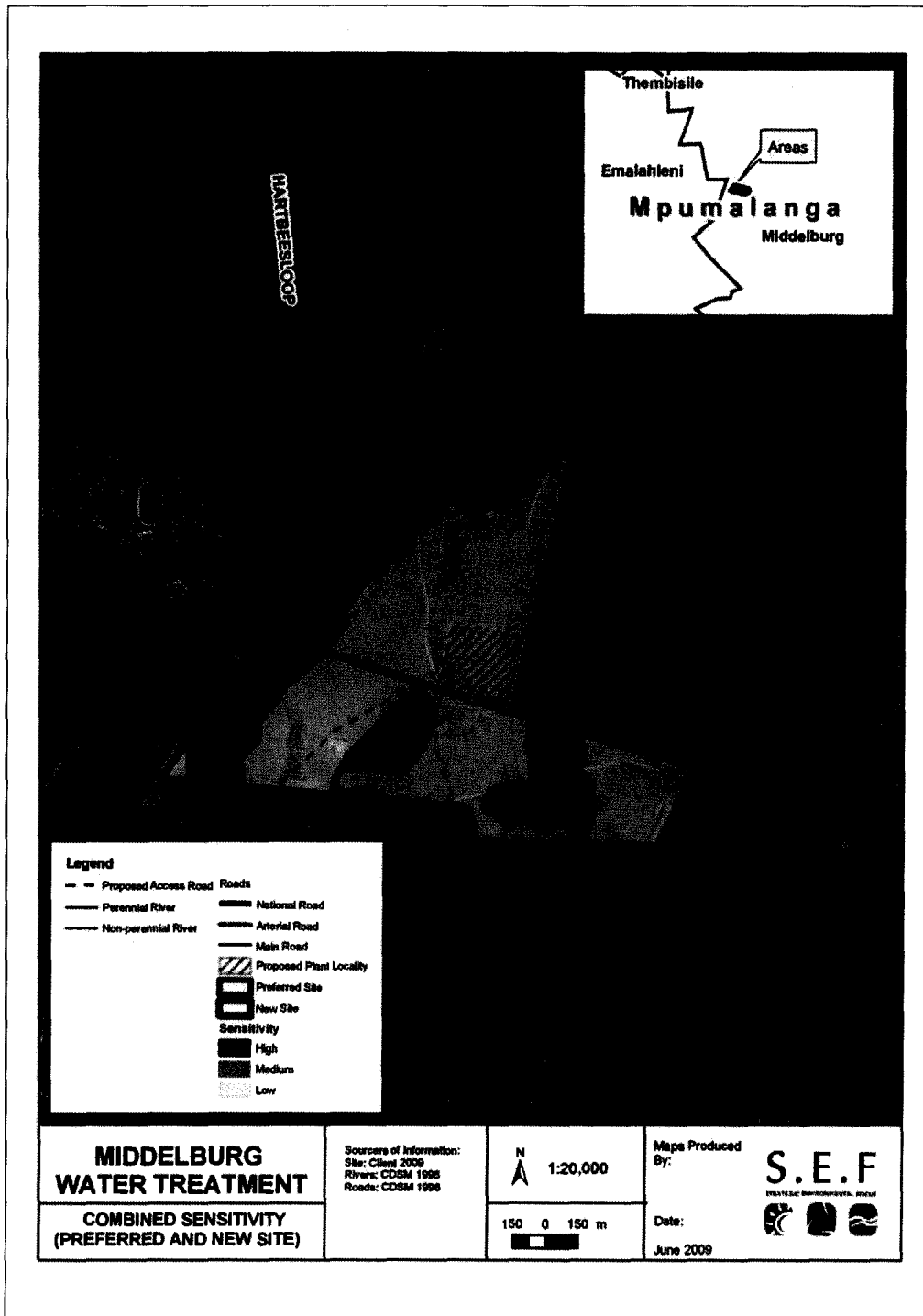


Figure B2.7 (e): Sensitivity Map of Combined Area (Source: SEF, 2009)



2.8 Heritage Resources

Although two ruins were identified by Cultmatrix when conducting the Heritage Impact Assessment, the heritage value of these were found to be low, although, for the one site it was recommended that the plans and elevations should be documented and the middens sampled for artifacts before demolition (Cultmatrix, 2008 – see Appendix K). From a heritage resources conservation perspective, Option 1 was found suitable for development. In addition, Cultmatrix did not find any potential heritage resources on the Extended Area to the south of Option 1.

2.9 Agricultural Land Capability

Based on work carried out by J&W in 2008, and using the Chamber of Mines' land capability guidelines, the land capability of Option 1 is as follows:

- Potential arable land comprises 56.2%
- Grazing 18.3%
- Wetland 25.5%

Although 56% is potentially arable, it is expected to be only fair unless treated and consequently considered better suited to grazing. The land capability of Option 1 is illustrated in **Figure B2.9**.

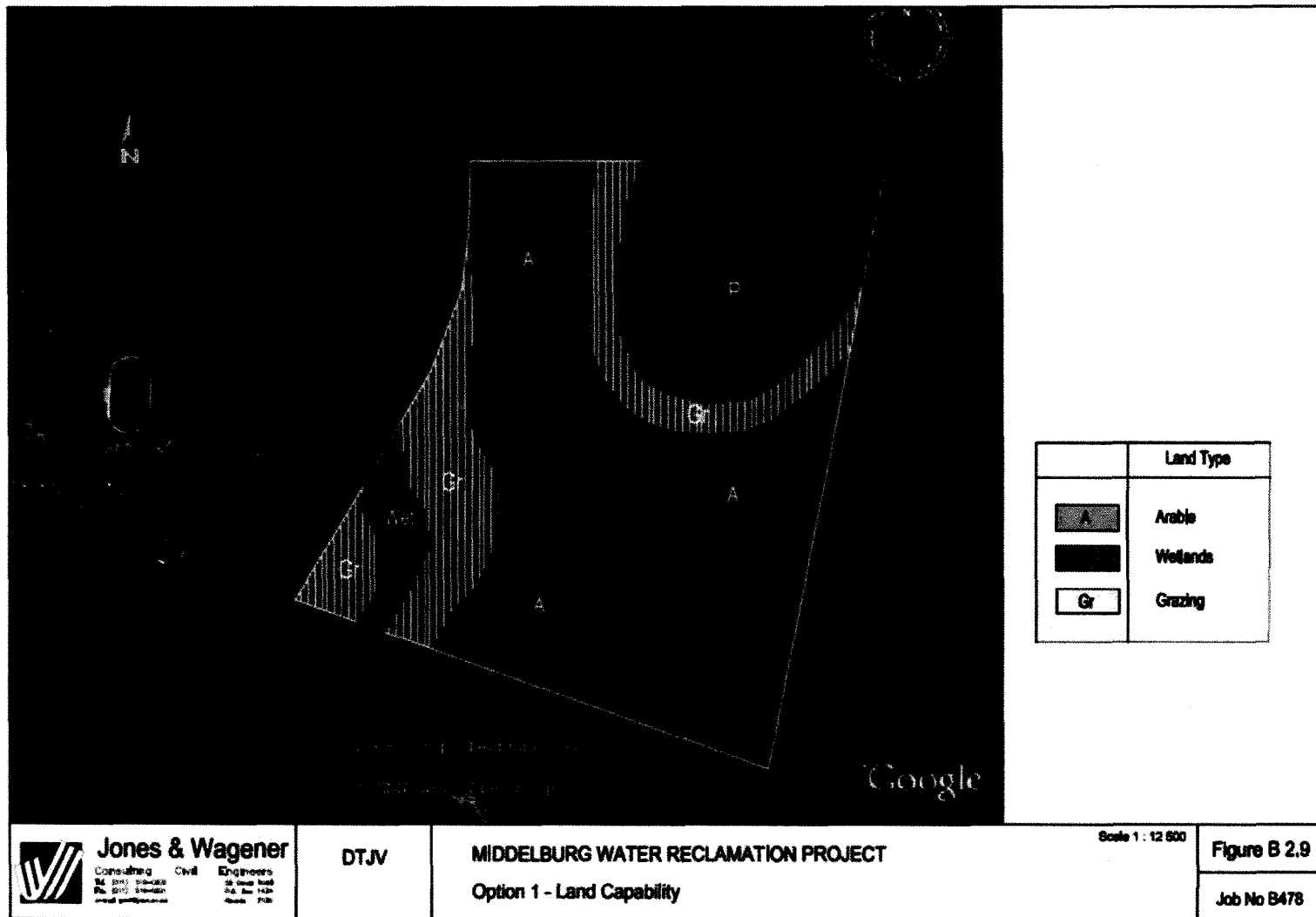


Figure B2.9: Land capability map of Option 1



3. OPTION 2: GOEDEHOOP

3.1 Location and ownership

Option 2 is located on Portions 25, 26 and 27 of the Farm Goedehoop 315 JS – See **Figure B3.1**. The site covers an area of approximately 35 hectares. As with Option 1, the land belongs to Ingwe Surface Holdings Limited (60%) and Tavistock Collieries (Pty) Ltd (40%). The surface rights belong to BECSA and the land is managed by Middelburg Mines.

The site is located to the immediate west of a mined area. The nearest farm residency is located approximately 880 metres to the south west of Option 2.

A large portion of the site has most probable been used for dry land farming in the past, as the blue gum trees appear to have been planted as a windbreak. Currently the land is lying fallow.

3.2 Access

Access to the site is firstly from a tertiary road that links the R575 with the south western suburbs of Middelburg on the northern side of the N4. The tertiary road is linked to the southern side of the N4 with a bridge. The tertiary road is mainly used for the transport of coal. The tertiary road splits into a number of farm and small mine service roads of which one leads to Option 2.

If the plant is to be established on Option 2, the small roads will have to be upgraded as large vehicles will often have to access the MWRP to deliver chemicals. Access to the site is seen as problematic, as the work force will also have to travel this road.

3.3 Topography and Drainage

Option 2 is located on the western slope of a topographic high, with surface water draining to the west and south. A pollution control dam is located to the immediate south of the site, which was developed for the open cast mine located to the east of Option 2. Option 2 is located at an elevation of approximately 1570 mamsl.

The site slopes at approximately 2.5% from the north eastern corner to the south western corner. Such slopes promote the free drainage of water. Although Option 2 has a good slope, the area has rocky outcrops, which will make levelling of land and preparation of terraces and foundations difficult and hence more expensive.

At its nearest point, Option 2 is approximately 2 000 metres from the Spookspruit located to the south west. To the immediate south, Option 2 is approximately 1 500 metres from an unnamed tributary of the Spookspruit in which a number of dams have been constructed.

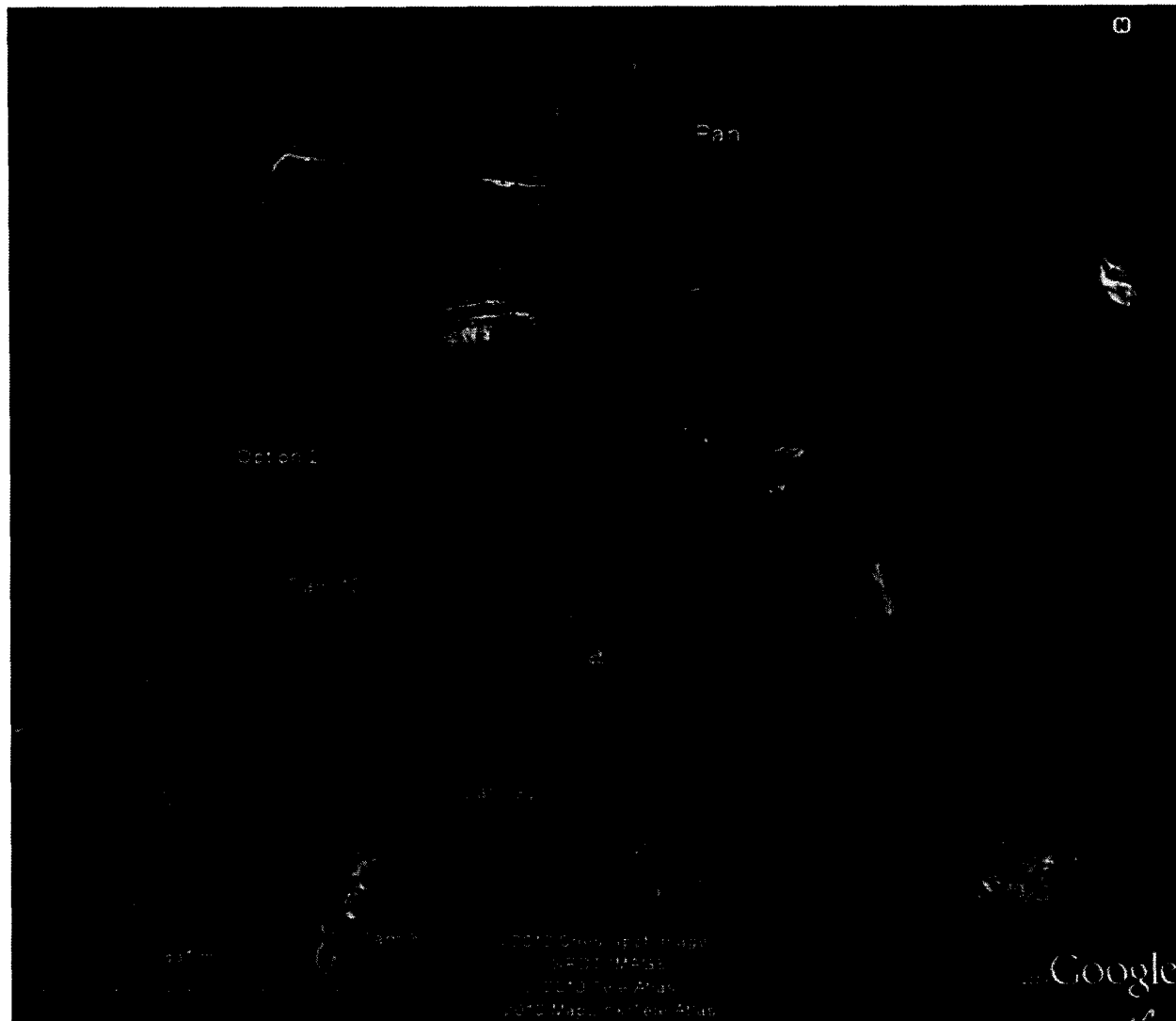


Figure B3.1: Locality of Option 2

3.4 Geology and Soils

Option 2 is also underlain with sedimentary rocks of the Karoo Sequence, which include shales and sandstones of the Vryheid Formation, Ecca Group. At Option 2 a dolerite sill is present above the Karoo sediments.

The typical soil profiles recorded can be summarised as follows:

- Side slope profile: This consists of a colluvium / hillwash horizon of 400 mm of brown silty sand with relatively closely packed gravels and ferricrete nodules, which overlies a residual sandstone of slightly moist, reddish brown streaked yellow-brown, dense, silty sand with fine residual gravels. Below a depth of approximately 1,4m this grades into a dense to very dense residual sandstone.
- Crestal profile, which consists of 700 mm thick boulder dolerite in a brown clayey sand matrix with ferricrete nodules on a residual dolerite of moist, reddish brown, soft to firm, silty clay with scattered hard rock dolerite boulders. The dolerite boulders encountered on surface and within the profile are highly variable in size.

The residual dolerite is not considered a suitable founding horizon due to settlement, but the residual sandstone, however, would provide suitable founding conditions (J&W, 2008 – see Appendix G).

3.5 Services and Servitudes

A power line, running in a north-west to south-easterly direction skirts the southern boundary of the site. Similarly to Option 1, the necessary permissions will have to be obtained where infrastructure could possibly cross this servitude, while during construction, cranes and other high equipment, should not come near the lines for safety reasons.

3.6 Land use

SEF did not indicate in their report what the land was used for in the past, but some dry land farming could have taken place on the north eastern portion of the site. However, on large portions of the site rocky outcrops occur, which would only have made these areas suitable for grazing.

3.7 Biodiversity and Sensitive Landscapes

SEF undertook a floral and faunal assessment of the site in order to establish its ecological status (SEF, 2008a and SEF, 2008b – see Appendices H and I). Based on the work conducted by them, Option 2 contains two vegetation types namely:

- Primary grassland, and
- Alien invasive bush clumps

These two floral communities are depicted in **Figure B3.7 (a)**. SEF indicated that the rocky grasslands, characteristically, have a higher biodiversity and are also regarded as a sensitive vegetation type. Furthermore, the Rand Highveld Grassland is an endangered vegetation community, which resulted in Option 2 being classified as medium to high sensitivity.

As the entire Option 2 is of a medium to high sensitivity in terms of floral status, it is not suitable for development – see **Figure B3.7 (b)**. However, from a faunal perspective, Option 2 revealed a low status and was therefore considered more suitable for development when evaluating the site from only a faunal perspective.

3.8 Heritage Resources

Cultmatrix found the ruins of four kraals on Option 2. These have low heritage conservation significance and no management measures were proposed (Cultmatrix, 2008 – see Appendix K). From a heritage resources conservation status, the site should be suitable for development.

3.9 Agricultural Land Capability

The land capability of the area, as classified by J&W, is shown on **Figure B3.9** and summarised below:

- Arable land 56.6%
- Grazing 25.3%
- Wetland 20.1%

The Glenrosa Form, although potentially arable, is characterised by a shallow effective depth and probably more suited to grazing.

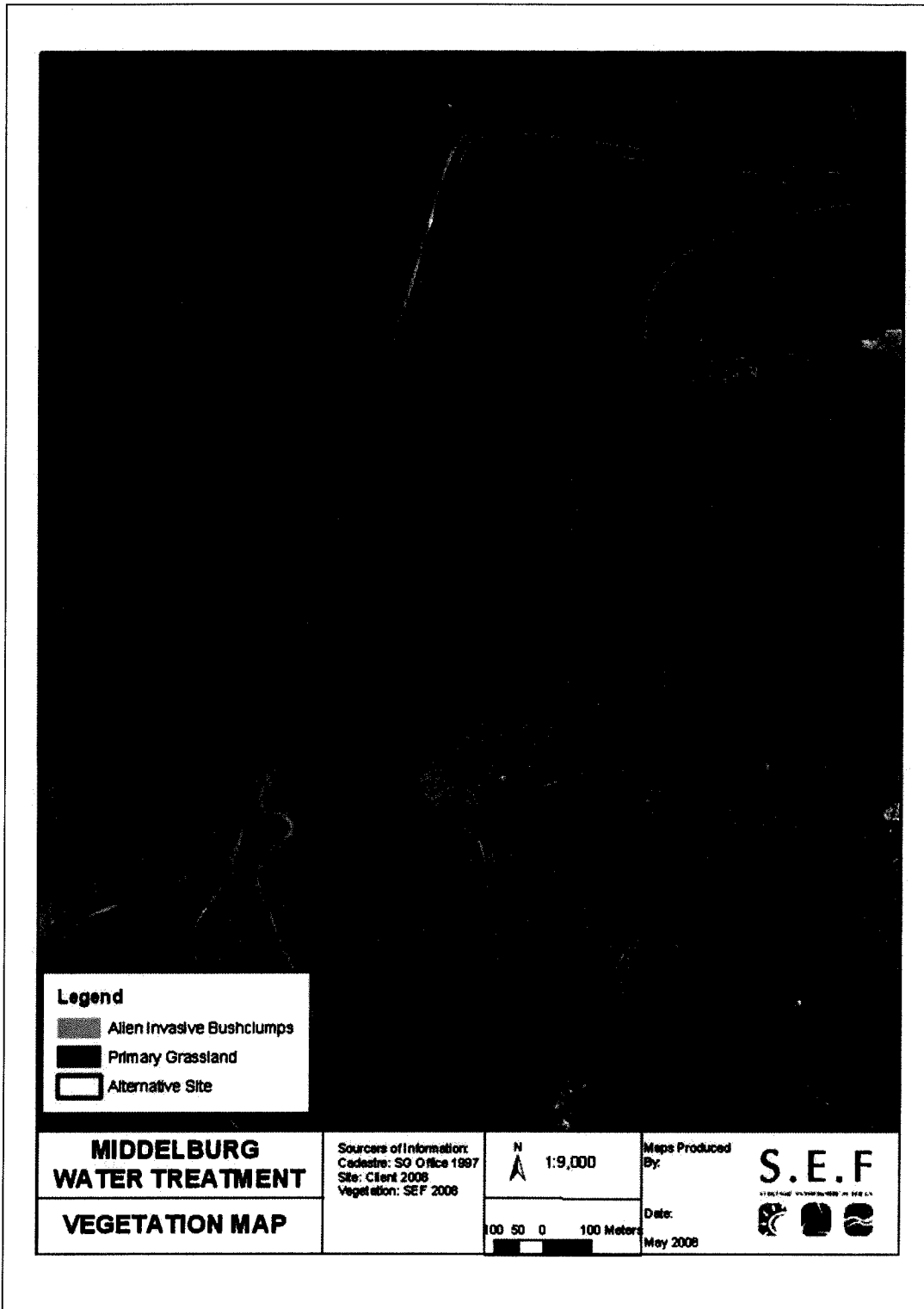


Figure B3.7 (a): Option 2: Vegetation Types

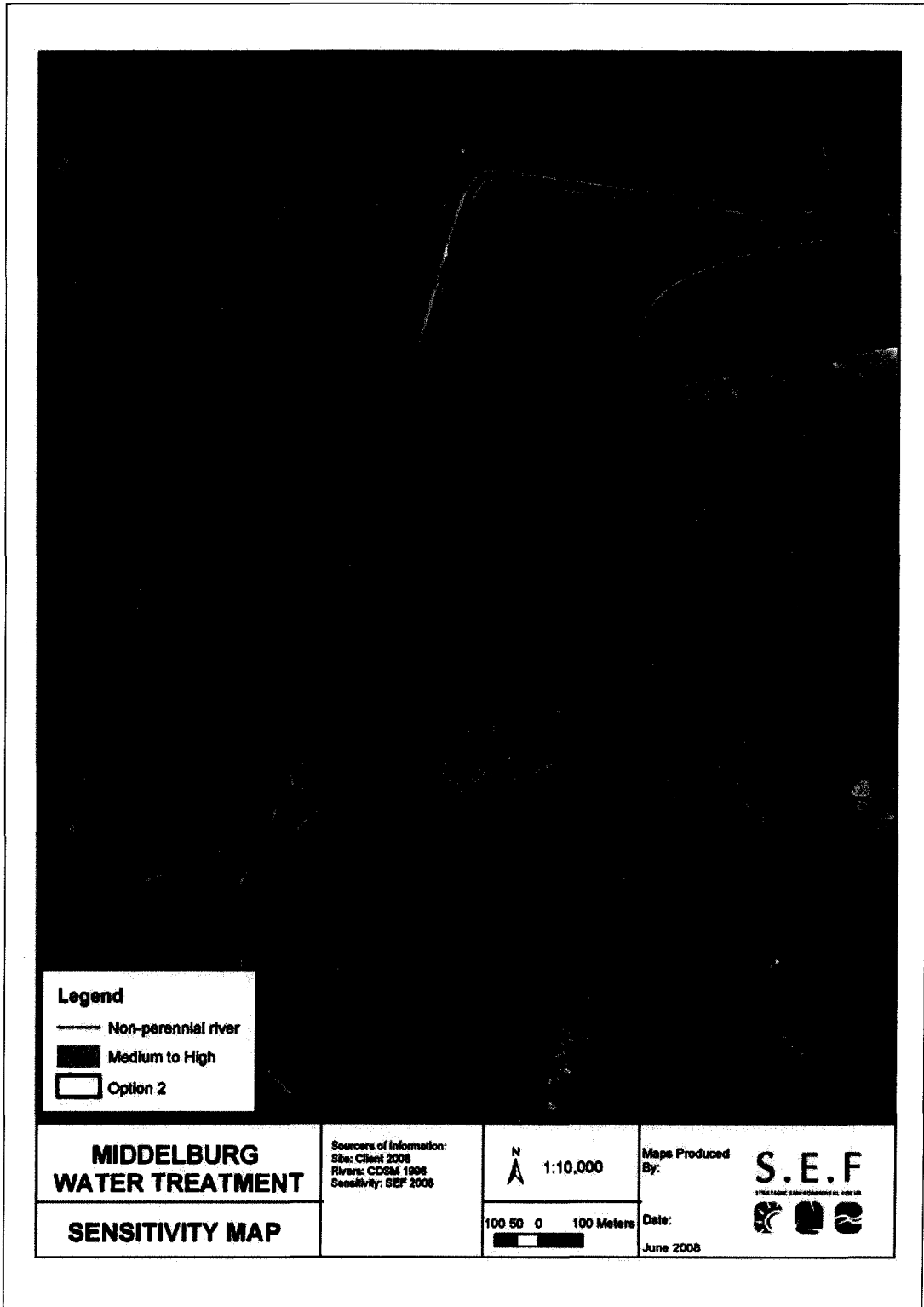


Figure B3.7 (b): Floral sensitivity map of Option 2



Figure B3.9: Land capability map for Option 2

4. DESCRIPTION OF CRITERIA USED FOR OPTION EVALUATION AND RANKING

4.1 Introduction

In order to evaluate the two options one has to develop some criteria for scoring and comparing the options. In this section an overview is given of the criteria used and the scoring system.

4.2 Technical and Economical Criteria

4.2.1 Ease of access

This criterion covers aspects such as:

- Remoteness of site and distance from secondary and tertiary roads to the site,
- Quality of existing road and ease with which access road can be upgraded or constructed if required, and
- Usage of road by others

The points allocated to a site or option with easy access will score a maximum of ten (10) if a good road is already in existence and it is not being frequently used by others.

Security at the mine is also an issue and a remote area is more vulnerable than an area with improved access.

4.2.2 Size of the Option

This is an obvious as a large site, which can accommodate both the water balancing dam, treatment plant and gypsum waste disposal facilities will score maximum points, namely ten (10).

4.2.3 Ease of incorporating other sources of impacted water

The lower the option is located in the catchment, the easier it should be to incorporate other sources of impacted water for treatment should the need arise. The most favourable option will score maximum points of ten (10). If water needs to be pumped uphill, points will be deducted.

4.2.4 Ease of construction

The two main issues here are slope or gradient and excavatability of soil. A site with an excessively steep slope could make construction more expensive due to cut and fill requirements. A site with rocky outcrops could also increase construction costs, as blasting has to be done, and additional equipment is required to handle large boulders and pieces of rock. The maximum point that can be obtained under this criterion is ten (10).

4.3 Environmental and Cultural Criteria

4.3.1 Floral and faunal status

A site with a low floral and faunal status would be given increased points out of ten (10), while a site with a high status would be penalised. The sensitivity of a landscape was taken into account under this criterion. A hillside or kopie would be penalised, while a flat portion of land, depending on its features, would be less penalised.

4.3.2 Groundwater occurrence and usage

Sites with low groundwater yields and far from existing groundwater users would obtain a high score out of ten (10), while a site where there are groundwater users and with high yield boreholes will be penalised.

4.3.3 Distance to surface water bodies

The closer a site is located to surface water bodies, the lesser the score. The reason for this is, should a plant malfunction, surface water bodies close by has an increased risk of being impacted. A score of ten (10) is indicative of a plant that is sufficiently well away from any sensitive surface water bodies, which includes pans and wetlands.

4.3.4 Cultural resources

A site on which cultural resources, either on the site or immediately adjacent to, would be penalised. If the cultural resource is of high significance, this could constitute a fatal flaw, i.e., the site needs to be abandoned and another site or option identified. A score of 10 indicates a site with no cultural resources.

4.4 Adjacent Land Uses

A site close to sensitive land uses would obtain a lower evaluation than one far away from any sensitive uses. For this criterion one should take wind direction into account, as this aspect influences how far noise and odours could travel. From the environmental description of the area in the main report, the area is known to be subjected to northerly winds for a large percentage of the time. It is also noted that the plant and the gypsum waste should not be generating any odours.

5. EVALUATION

Based on the above and the site descriptions given, the two options were evaluated and ranked – see Table 5 below against a number of criteria. The score obtained for Option 1 is 78%, while that obtained for Option 2 is 72%. This score is obtained provided that the high sensitive floral areas, and the pans and associated wetlands of Option 1 and the Expanded Area are excluded for the development of any of the plant infrastructure. In addition, care should be taken during the construction phase for the location of material lay-down and equipment lay-down areas, construction offices, ablution facilities, etc. These aspects need to be carefully considered by the EAP and the technical design team during the EIA phase.

Based on this evaluation, it is motivated that Option 1 and the Expanded Area be taken forward in the S&EIR process for in depth evaluation during the assessment phase of the project.

Table 5: Evaluation of Alternative Site Location Options

Aspect	Technical and economical				Environmental and Cultural				Adjacent land uses	Land use	Total Score
	Ease of Access	Size	Ease of incorporation of other mining sections	Ease and cost of construction	Lack of floral and faunal species	Lack of Groundwater occurrence	Distance to surface water	Lack of Cultural Resources	Lack of distance to sensitive land uses	Agricultural land capability	
Potential Score	10	10	10	10	10	10	10	10	10	10	100
Option 1 + Extended Area	9 ⁽¹⁾	10	8 ⁽²⁾	10	6 ⁽³⁾	6	8	7	7	6	77
Option 2	5	7	7	6	7	6	10 ⁽⁴⁾	8	8	7	71

Notes:

1: For Option 1 a new road from the R575 will have to be constructed, while the existing road to Option 2 will have to be significantly upgraded to accommodate large vehicles. Option 2 is also significantly more remote and used by others large vehicles, which makes it more dangerous.

2: Although Option 1 is located higher up in the catchment, Option 2 is located at a slightly higher elevation. Therefore Option 1 received a higher score.

3: A score of 7 is given to Option 1 for lack of floral and faunal species provided the identified wetland areas and pan is avoided.

4: An impacted mine water spillage at Option 2 would enter into an impacted mine water system, which is a positive aspect.

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DOUGLAS TAVISTOCK JOINT VENTURE
MIDDELBURG WATER RECLAMATION PLANT PROJECT
ENVIRONMENTAL IMPACT ASSESSMENT
Draft EIR

Report: JW45/11/B478 - Rev C

Appendix D: Specialist Studies

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- D.2 Aquatic Impact Assessment
- D.3 Biodiversity Impact Assessment (Ecological, Floral, Fauna and Wetlands)
- D.4 Flow rates
- D.5 Geophysical Survey
- D.6 Geotechnical and Land Capability Assessment
- D.7 Groundwater Assessment
- D.8 Gypsum Hazard Rating
- D.9 Heritage Impact Assessment
- D.10 Noise Impact Assessment
- D.11 Socio-Economic Impact Assessment
- D.12 Surface Water Assessment
- D.13 Traffic Impact Assessment
- D.14 Water Resource Assessment



D.1 Air Quality Assessment



Project done on behalf of Jones and Wagener (Pty) Ltd

**ATMOSPHERIC IMPACT ASSESSMENT FOR THE
PROPOSED MINE WATER TREATMENT FACILITY,
MIDDELBURG, MPUMALANGA**

Report No.: APP/08/ JW-01 Rev 1.1

DATE: October 2008

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EXECUTIVE SUMMARY

BHP Billiton Energy Coal South Africa (BESCA), major shareholder in Middelburg Mine Services (MMS) is in the process of conducting a feasibility study into the construction and operation of a 25Ml/d mine water treatment facility (the MWRS) to be located on the North Section of Middelburg Mine in Mpumalanga. This water treatment facility will treat all excess mine water produced by both MMS and Douglas Colliery (known as the DMO project) as well as mine water supplied from Bank /Goedehoop Colliery (Anglo Coal) to catchment standards for release into the catchment and/or to drinking water standard to supply to local users (Steve Tswete Municipality and neighbouring mines). The basic process involves pH adjustment, precipitation and settling of metal salts, followed by micro-filtration and reverse osmosis to reduce excess dissolved solids, and disinfection by chlorine.

The preferred location is on the north-western corner of the Middelburg mine North section. Alternative, but an alternative location approximately 5.4 km north-east of the preferred location is also being considered.

Airshed Planning Professionals (Pty) Ltd (APP) was instructed to produce a basic air quality impact assessment for the construction and operation of the facilities focusing on the potential for air pollution emanating from the proposed facility.

Information on the atmospheric dispersion potential obtained from measuring stations in the Witbank/Middelburg area is summarised and pertinent dust deposition data gathered at Middelburg mine north section provides background air quality data. No measured respirable dust (PM10) data could be sourced.

CONCLUSIONS

Construction phase.

Construction of the water treatment plant itself as well as the associated brine and sludge dams will require that considerable areas will need to be cleared and excavations carried out. Similarly, the trenching and backfilling for the installation of the associated pipelines will require excavation. Such construction activities, which will also include the movement of vehicles on unpaved roads, have the potential to emit both fine (PM10) and settleable (PM30) dust additional to the background values described above. The rate of dust emission and the impact thereof on PM10 and dust deposition values will be determined by the properties of the material and the construction schedule and it is at this stage not possible to quantify the effects. They will obviously be of a temporary nature, and the EMP for construction must make provision for mitigatory measures.

Operational phase

- Plant operation

All processes are in the liquid phase and no material emissions to air are foreseen. Disinfection using chlorine gas does not under normal operational conditions give rise to emissions to air, but a potential risk exists due to the handling and storage of chlorine cylinders. A proper risk assessment should be carried out for this.

- Sludge and brine handling.

Brine evaporation ponds will remain in the liquid phase for the operational life of the plant and will therefore have no material impact on the concentration of airborne pollutants. From the pre-feasibility investigation report, it is clear that both the wet sludge and filter cake disposal options still have a high water content in the sludge disposal dams which would to all intents and purposes eliminate emissions to air. Most probably, odour nuisance would also be minimal due to the inorganic nature of the sludge. The report also indicates that the side walls of the sludge dams would be covered with topsoil as they are built, so that even wind erosion from these side walls will be minimal, especially as the walls become vegetated.

RECOMMENDATIONS

Construction phase

The EMP for the construction phase needs to address the potential for dust emissions during this phase. Monitoring of the existing network of dustfall gauges during the construction period should be carried out and a spraying program instituted on the construction sites and unpaved roads and used for construction vehicles. Such a spraying program is best managed by taking cognisance of the rainfall and evaporation rates prevalent at the time. The control efficiency of various unpaved road watering rates may be estimated based on the empirical model developed by the US-EPA (EPA, 1992). This model estimates control efficiencies of watering based on: (i) average hourly daytime traffic rate, (ii) water application intensity in litres per m², (iii) time between applications, and (iv) site-specific evaporation potential. Assuming that traffic rates, evaporation potentials and the time between applications remain constant, dust control efficiencies associated with various rates of watering may be estimated.

Economical portable real-time PM10 monitors are available and should be used on the construction site of the water treatment plant to monitor water spraying programs for the major activities.

Operational phase

No material emissions to air are expected during the operational phase of the plant, provided that topsoil covering and vegetation is carried out for the sludge disposal dams as proposed in the pre-feasibility investigation (Golder Associates Africa, .2008)

A formal risk assessment on the handling and storage of stored chemicals, especially chlorine cylinders, must be carried out and compliance to the Major Hazardous Installations regulations of the OHS Act should be ensured.

1 INTRODUCTION

BHP Billiton Energy Coal South Africa (BESCA), major shareholder in Middelburg Mine Services (MMS) is in the process of conducting a feasibility study into the construction and operation of a 25Ml/d mine water treatment facility (the MWRS) to be located on the North Section of Middelburg Mine in Mpumalanga. This water treatment facility will treat all excess mine water produced by both MMS and Douglas Colliery (known as the DMO project) as well as mine water supplied from Bank /Goedehoop Colliery (Anglo Coal) to catchment standards for release into the catchment and/or to drinking water standard to supply to local users (Steve Tswete Municipality and neighbouring mines). The basic process involves pH adjustment, precipitation and settling of metal salts, followed by micro-filtration and reverse osmosis to reduce excess dissolved solids, and disinfection by chlorine.

Figure 1-1 below provides a location map of the proposed facilities and associated collection pipeline. The preferred location is on the north-western corner of the Middelburg mine North section (indicated as Hartbeesfontein MWRP site). An alternative locations is approximately 5.4 km north-east of the preferred location. Treated water will be delivered to either of the indicated reservoirs or to the connecting Nkangala pipeline

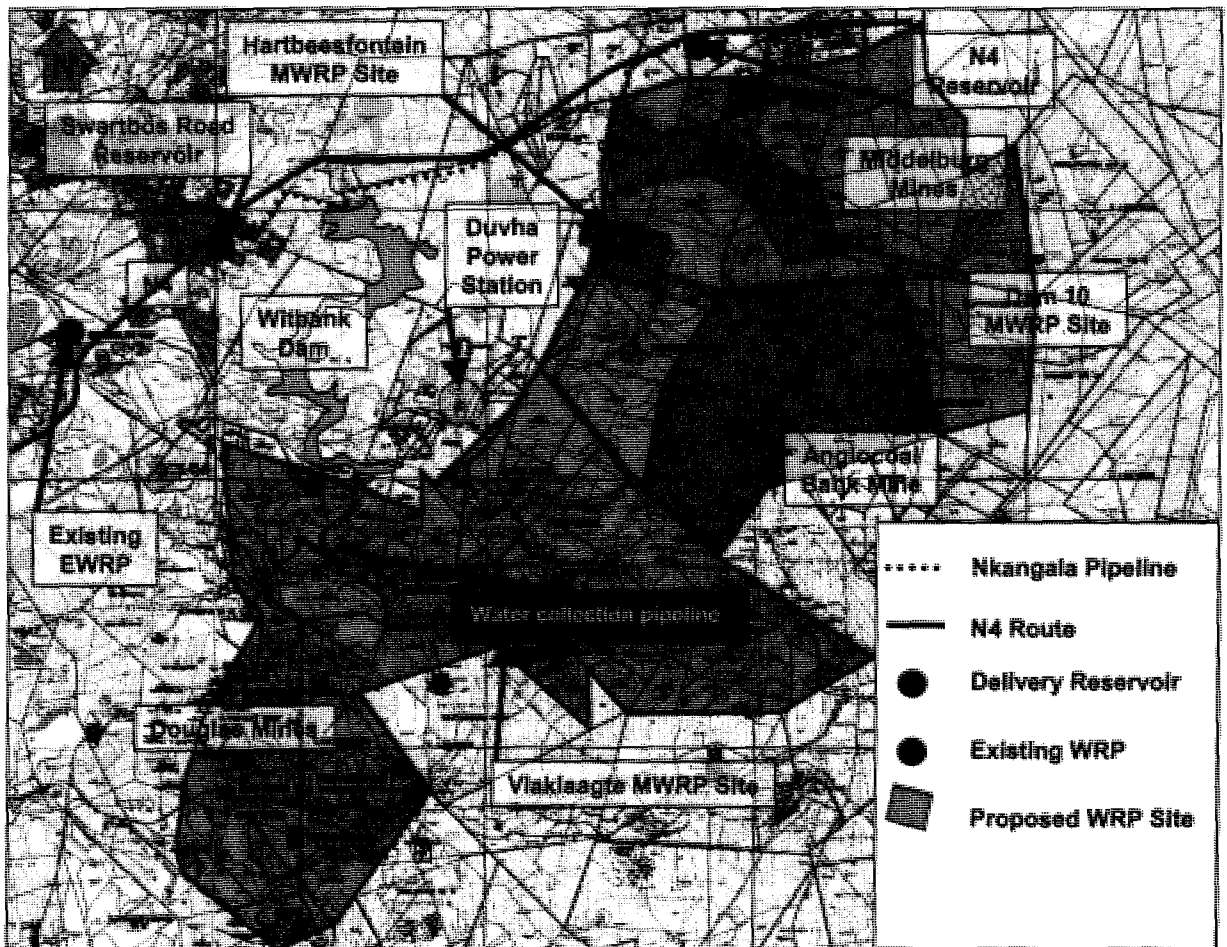


Figure 1-1: Location diagram.(courtesy Golder Associates Africa)

As part from the construction of a 25 Ml/d water treatment facility on Middelburg Mine the following infrastructure is *inter alia* to be considered:

- A Water Reclamation Plant & office facilities
- Water holding facilities (reservoirs / dams)
- Brine Disposal Facilities
- Sludge Disposal Facilities
- Access road to the Water Reclamation Plant
- Collection pipelines & temporary storage facilities
- Distribution pipeline/s

Airshed Planning Professionals (Pty) Ltd (APP) was instructed to produce a basic air quality impact assessment for the construction and operation of the facilities focusing on the potential for air pollution emanating from the proposed facility.

The terms of reference are as follows:

- Compile an emissions inventory for the proposed project including fugitive releases for the different phases of operation;
- Obtain meteorological data and, if available, ambient background information for the area concerned
- Determine ambient air pollutant concentrations arising from the emissions during construction and operation
- Compare the predicted concentrations and the cumulative impact with local and applicable overseas health-based standards and guidelines
- Propose mitigation measures if found to be necessary

2 LOCATION

2.1 Sensitive Receptors

The major source of airborne pollutants is expected to be the emission of dust during the construction phase. For the purpose of the current study, sensitive receptors refer to any residential settlements or other activities that may be negatively impacted by airborne pollution or nuisance dustfall, from the MWRS. These will mainly be adjacent to the Middelburg mine North section as shown in figure 1-2 below.

Middelburg Mines North Section comprises Bankfontein, Hartbeesfontein and Goedehoop mines. Mining has ceased at Bankfontein (pit rehabilitated) and there are currently no mining operations at Hartbeesfontein. Active mining is therefore only underway at Goedehoop within the North Section. Middelburg Mines South Section includes South Pit (Driefontein), Vlaklaagte and Wolwekrans. Mining has ceased at Wolwekrans and Vlaklaagte with these pits having been rehabilitated (Figure 1.2).

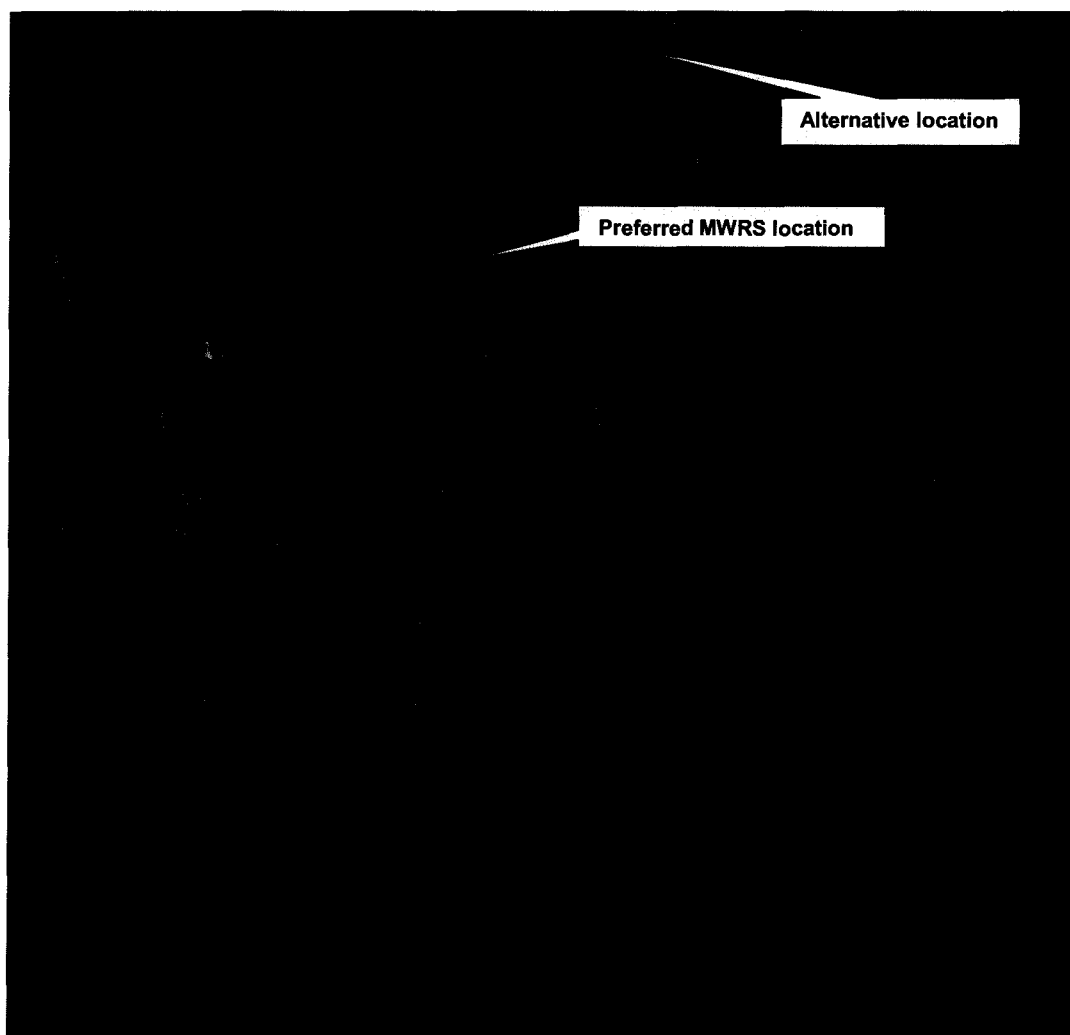


Figure 2.1 Location of Middelburg Mine operations in relation to neighbouring mining operations and residential settlements.

Residential settlements located in close proximity to the preferred location include the Naledi Village and the CJ Schoeman Chicken Farm (Figure 1.2). The Naledi Village is situated at the northwestern boundary of the Hartbeesfontein Mine lease area. The chicken farm is situated to the north of the Naledi Village and west of the Middelburg Mine's Goedehoop South operation.

3 AMBIENT AIR QUALITY CRITERIA

3.1 South African legal context

Since 1965, industries with the potential to cause air pollution have been controlled in terms of the Atmospheric Pollution Prevention Act (45/1965). Processes listed in Schedule 2 of this Act may not be operated unless in possession of a valid registration certificate issued by the Chief Air Pollution Control officer (CAPCO) in the Department of Environmental Affairs and Tourism (DEAT). No formal emission standards or ambient air quality standards were set in terms of APPA, but informal emission guidelines were issued for some processes and informal ambient air quality guidelines were set. The control of dust was delegated to the Department of Minerals and Energy (DME), who often included sections on dust control in mine environmental management plans (EMPs).

The National Environmental Management – Air Quality Act (39/2004) (NEM-AQA) is intended to replace APPA. It was brought into force in Sept. 2005 except for the sections controlling industrial processes. It is intended that licensing of industrial processes will be done by local authorities (metropolitan and district municipalities) starting in the areas whose authorities have been capacitated to do so. These will probably be the major metros (including Johannesburg, eThekweni, Cape Town, Tshwane and Ekurhuleni) from 2009 onwards, while licensing in the rural areas will be transferred to district municipalities only at a later stage. A section of the Act deals specifically with the control of dust, but this is of an enabling nature only and will require regulations to implement. A memorandum of understanding between DEAT and DME allows DME to continue as the leading agent in environmental management for mines..

In terms of NEM-AQA, it is intended to set both ambient air quality standards and emission limits. Proposals for both have been published for comment. Regarding ambient standards, only the criteria pollutants (which include particulate matter) are included in the present proposals. Emission limits have been proposed for all the major industrial sectors, but at this stage no emission limits for water treatment plants or the use of chemicals in these plants have been proposed. Both the proposed ambient air quality standards and the proposed emission standards are at present being discussed in the relevant STANSA (Standards South Africa- previously the SABS) technical committee (TC 143) and publication of the final outcomes is expected during 2009.

3.2 Ambient air quality standards.

Air quality guidelines and standards are fundamental to effective air quality management, providing the link between the source of atmospheric emissions and the user of that air at the downstream receptor site. The ambient air quality limits are intended to indicate safe daily exposure levels for the majority of the population, including the very young and the elderly, throughout an individual's lifetime. Such limits are given for one or more specific averaging periods, typically 10 minutes, 1-hour average, 24-hour average, 1-month average, and/or annual average.

The ambient air quality guidelines and standards for particulate matter, which is expected to be the main pollutant arising from the construction and operation of the proposed facility, are presented in the subsection below. Air quality limits issued nationally by the DEAT and STANSA¹ are reflected together with limits published by the WHO, EC, World Bank, UK, Australia and US-EPA.

3.2.1 Suspended Particulate Matter (Dust)

The impact of particles on human health is largely depended on (i) particle characteristics, particularly particle size and chemical composition, and (ii) the duration, frequency and magnitude of exposure. The potential of particles to be inhaled and deposited in the lung is a function of the aerodynamic characteristics of particles in flow streams. The aerodynamic properties of particles are related to their size, shape and density.

Air quality guidelines for particulates are given for various particle size fractions, including total suspended particulates (TSP), inhalable particulates or PM10 (i.e. particulates with an aerodynamic diameter of less than 10 µm), and respirable particulates of PM2.5 (i.e. particulates with an aerodynamic diameter of less than 2.5 µm). Although TSP is defined as all particulates with an aerodynamic diameter of less than 100 µm, and effective upper limit of 30 µm aerodynamic diameter is frequently assigned. PM10 and PM2.5 are of concern due to their health impact potentials. As indicated previously, such fine particles are able to be deposited in, and damaging to, the lower airways and gas-exchanging portions of the lung.

PM10 limits and standards issued nationally and abroad are documented in Table 3.1 below. In addition to the PM10 standards published in schedule 2 of the Air Quality Act, the Act also includes standards for total suspended particulates (TSP), viz. a 24-hour average maximum concentration of 300 µg/m³ not to be exceeded more than three times in one year and an annual average of 100 µg/m³. It must be stressed that these standards are of a temporary nature only and that they will probably shortly (by Sept 2009) be superseded by the standards first proposed in SANS 1929 in 2004, subsequently published by DEAT for public comment and presently being debated by a sub-committee of TC143.

Table 3.1: Air quality standard for inhalable particulates (PM10)

Authority	Maximum 24-hour Concentration (µg/m ³)	Annual Average Concentration (µg/m ³)
SA standards (Air Quality Act)	180(a)	60
RSA SANS limits (SANS:1929,2004)	75(b) 50(c)	40(d) 30(e)
Australian standards	50(f)	-
European Community (EC)	50(g)	30(h) 20(i)
World Bank (General Environmental Guidelines)	70(j)	50(j)
World Bank (Thermal Power Guidelines)	150(k)	50(k)
United Kingdom	50(l)	40(m)
United States EPA	150(n)	50(o)
World Health Organisation	(p)	(p)

Notes:

- (a) Not to be exceeded more than three times in one year.
- (b) Limit value. Permissible frequencies of exceedance, margin of tolerance and date by which limit value should be complied with not yet set.
- (c) Target value. Permissible frequencies of exceedance and date by which limit value should be complied with not yet set.
- (d) Limit value. Margin of tolerance and date by which limit value should be complied with not yet set.
- (e) Target value. Date by which limit value should be complied with not yet set.
- (f) Australian ambient air quality standards. (<http://www.deh.gov.au/atmosphere/airquality/standards.html>). Not to be exceeded more than 5 days per year. Compliance by 2008.
- (g) EC First Daughter Directive, 1999/30/EC (<http://europa.eu.int/comm/environment/air/ambient.htm>). Compliance by 1 January 2005. Not to be exceeded more than 25 times per calendar year. (By 1 January 2010, no violations of more than 7 times per year will be permitted.)
- (h) EC First Daughter Directive, 1999/30/EC (<http://europa.eu.int/comm/environment/air/ambient.htm>). Compliance by 1 January 2005
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- (m) UK Air Quality Objectives. www.airquality.co.uk/archive/standards/php. Compliance by 31 December 2004
- (n) US National Ambient Air Quality Standards (www.epa.gov/air/criteria.html). Not to be exceeded more than once per year.
- (o) US National Ambient Air Quality Standards (www.epa.gov/air/criteria.html). To attain this standard, the 3-year average of the weighted annual mean PM10 concentration at each monitor within an area must not exceed 50 µg/m³.
- (p) WHO (2000) issued linear dose-response relationships for PM10 concentrations and various health endpoints with no specific guideline provided. WHO (2005) made available during early 2006 proposes several interim target levels (see subsequent tables).

During the 1990s the World Health Organisation (WHO) stated that no safe thresholds could be determined for particulate exposures and responded by publishing linear dose-response relationships for PM10 and PM2.5 concentrations (WHO, 2005). This approach was not well accepted by air quality managers and policy makers. As a result the WHO Working Group of Air Quality Guidelines recommended that the updated WHO air quality guideline document contain guidelines that define concentrations which, if achieved, would be expected to result in significantly reduced rates of adverse health effects. These guidelines would provide air quality managers and policy makers with an explicit objective when they were tasked with setting national air quality standards. Given that air pollution levels in developing countries frequently far exceed the recommended WHO air quality guidelines (AQGs), the Working Group also proposed interim targets (IT) levels, in excess of the WHO AQGs themselves, to promote steady progress towards meeting the WHO AQGs (WHO, 2005). The air quality guidelines and interim targets issued by the WHO in 2005 for particulate matter are given in Tables 3.2 and 3.3 below.

Table 3.2 WHO air quality guideline and interim targets for particulate matter (annual mean) (WHO, 2005)

Annual Mean Level	PM10 (µg/m ³)	PM2.5 (µg/m ³)	Basis for the selected level
WHO interim target-1 (IT-1)	70	35	These levels were estimated to be associated with about 15% higher long-term mortality than at AQG
WHO interim target-2 (IT-2)	50	25	In addition to other health benefits, these levels lower risk of premature mortality by approximately 6% (2-11%) compared to WHO-IT1
WHO interim target-3 (IT-3)	30	15	In addition to other health benefits, these levels reduce mortality risks by another approximately 6% (2-11%) compared to WHO-IT2 levels.
WHO Air Quality Guideline (AQG)	20	10	These are the lowest levels at which total, cardiopulmonary and lung cancer mortality have been shown to increase with more than 95% confidence in response to PM2.5 in the American Cancer Society (ACS)

			study (Pope <i>et al.</i> , 2002 as cited in WHO 2005). The use of the PM2.5 guideline is preferred.
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Table 3.3 WHO air quality guideline and interim targets for particulate matter (daily mean) (WHO, 2005)

Annual Mean Level	PM10 ($\mu\text{g}/\text{m}^3$)	PM2.5 ($\mu\text{g}/\text{m}^3$)	Basis for the selected level
WHO interim target-1 (IT-1)	150	75	Based on published risk coefficients from multi-centre studies and meta-analyses (about 5% increase of short-term mortality over AQG)
WHO interim target-2 (IT-2)*	100	50	Based on published risk coefficients from multi-centre studies and meta-analyses (about 2.5% increase of short-term mortality over AQG)
WHO interim target-3 (IT-3)**	75	37.5	Based on published risk coefficients from multi-centre studies and meta-analyses (about 1.2% increase of short-term mortality over AQG)
WHO Air Quality Guideline (AQG)	50	25	Based on relation between 24-hour and annual levels

* 99th percentile (3 days/year)

** for management purposes, based on annual average guideline values; precise number to be determined on basis of local frequency distribution of daily means

3.2.2 Dust Deposition

Foreign dust deposition standards issued by various countries are given in Table 3.4. It is important to note that the limits given by Argentina, Australia, Canada, Spain and the USA are based on annual average dustfall. The standards given for Germany are given for maximum monthly dustfall and therefore comparable to the dustfall categories issued locally. Based on a comparison of the annual average dustfall standards it is evident that in many cases a threshold of $\sim 200 \text{ mg}/\text{m}^2/\text{day}$ to $\sim 300 \text{ mg}/\text{m}^2/\text{day}$ is given for residential areas.

Locally dust deposition is evaluated according to the criteria previously published by the South African Department of Environmental Affairs and Tourism (DEAT). In terms of these criteria dust deposition is classified as follows:

SLIGHT	-	less than $250 \text{ mg}/\text{m}^2/\text{day}$
MODERATE	-	250 to $500 \text{ mg}/\text{m}^2/\text{day}$
HEAVY	-	500 to $1200 \text{ mg}/\text{m}^2/\text{day}$
VERY HEAVY	-	more than $1200 \text{ mg}/\text{m}^2/\text{day}$

The Department of Minerals and Energy (DME) uses the $1200 \text{ mg}/\text{m}^2/\text{day}$ threshold level as an action level. In the event that on-site dustfall exceeds this threshold, the specific causes of high dustfall should be investigated and remedial steps taken.

"Slight" dustfall is barely visible to the naked eye. "Heavy" dustfall indicates a fine layer of dust on a surface, with "very heavy" dustfall being easily visible should a surface not be cleaned for a few days. Dustfall levels of $> 2000 \text{ mg}/\text{m}^2/\text{day}$ constitute a layer of dust thick enough to allow a person to "write" words in the dust with their fingers.

Table 3.4: Dust deposition standards issued by various countries

Country	Annual Average Dust Deposition Standards (based on monthly monitoring) (mg/m ² /day)	Maximum Monthly Dust Deposition Standards (based on 30 day average) (mg/m ² /day)
Argentina	133	
Australia	133 (onset of loss of amenity) 333 (unacceptable in New South Wales)	
Canada Alberta: Manitoba:	179 (acceptable) 226 (maximum acceptable) 200 (maximum desirable)	
Germany		350 (maximum permissible in general areas) 650 (maximum permissible in industrial areas)
Spain	200 (acceptable)	
USA: Hawaii Kentucky	200 175	
New York	200 (urban, 50 percentile of monthly value) 300 (urban, 84 percentile of monthly value)	
Pennsylvania	267	
Washington	183 (residential areas) 366 (industrial areas)	
Wyoming	167 (residential areas) 333 (industrial areas)	

A perceived weakness of the current dustfall guidelines is that they are purely descriptive, without giving any guidance for action or remediation (SLIGHT, MEDIUM, HEAVY, and VERY HEAVY). It has recently been proposed (as part of the SANS air quality standard setting processes) that dustfall rates be evaluated against a four-band scale, as presented in Table 3.5. Proposed target, action and alert thresholds for ambient dust deposition are given in Table 3.6.

According to the proposed dustfall limits an enterprise may submit a request to the authorities to operate within the Band 3 ACTION band for a limited period, providing that this is essential in terms of the practical operation of the enterprise (for example the final removal of a tailings deposit) and provided that the best available control technology is applied for the duration. No margin of tolerance will be granted for operations that result in dustfall rates in the Band 4 ALERT.

These proposals do however not appear in the most recent discussion document on ambient air quality standards issued by DEAT and their adoption is therefore uncertain at this stage.

Table 3.5: Bands of dustfall rates proposed for adoption

BAND NUMBER	BAND DESCRIPTION LABEL	DUST-FALL RATE (D) (mg m ⁻² day ⁻¹ , 30-day average)	COMMENT
1	RESIDENTIAL	D < 600	Permissible for residential and light commercial
2	INDUSTRIAL	600 < D < 1 200	Permissible for heavy commercial and industrial
3	ACTION	1 200 < D < 2 400	Requires investigation and remediation if two sequential months lie in this band, or more than three occur in a year.
4	ALERT	2 400 < D	Immediate action and remediation required following the first exceedance. Incident report to be submitted to relevant authority.

Table 3.6: Target, action and alert thresholds for ambient dustfall

LEVEL	DUST-FALL RATE (D) (mg m ⁻² day ⁻¹ , 30-day average)	AVERAGING PERIOD	PERMITTED FREQUENCY OF EXCEEDANCES
TARGET	300	Annual	
ACTION RESIDENTIAL	600	30 days	Three within any year, no two sequential months.
ACTION INDUSTRIAL	1 200	30 days	Three within any year, not sequential months.
ALERT THRESHOLD	2 400	30 days	None. First exceedance requires remediation and compulsory report to authorities.

4 CLIMATOLOGY AND ATMOSPHERIC DISPERSION POTENTIAL

Meteorological mechanisms govern the dispersion, transformation and eventual removal of pollutants from the atmosphere. The extent to which pollution will accumulate or disperse in the atmosphere is dependent on the degree of thermal and mechanical turbulence within the earth's boundary layer. Dispersion comprises vertical and horizontal components of motion. The stability of the atmosphere and the depth of the surface-mixing layer define the vertical component. The horizontal dispersion of pollution in the boundary layer is primarily a function of the wind field. The wind speed determines both the distance of downwind transport and the rate of dilution as a result of plume 'stretching'. The generation of mechanical turbulence is similarly a function of the wind speed, in combination with the surface roughness. The wind direction, and the variability in wind direction, determines the general path pollutants will follow, and the extent of crosswind spreading. Pollution concentration levels therefore fluctuate in response to changes in atmospheric stability, to concurrent variations in the mixing depth, and to shifts in the wind field.

Spatial variations, and diurnal and seasonal changes, in the wind field and stability regime are functions of atmospheric processes operating at various temporal and spatial scales (Goldreich and Tyson, 1988). Atmospheric processes at macro- and meso-scales need therefore be taken into account in order to accurately parameterise the atmospheric dispersion potential of a particular area. A summary of the synoptic scale information relevant to this area is given in Appendix A.

4.1 Meso-scale Ventilation and Site-specific Dispersion Potential

The analysis of hourly average meteorological data is necessary to facilitate a comprehensive understanding of the ventilation potential of the site, and to provide the input requirements for the dispersion simulations. A comprehensive data set for at least one year of detailed hourly average wind speed, wind direction and temperature data are needed for the dispersion simulations. Surface meteorological data were obtained from the Weather Service Station in Witbank for the period 2001 – 2005, a four year period being considered sufficient to capture even extreme conditions. The station is located west of Witbank at an exposed location which will provide representative data for the region.

4.1.1 Local wind field

The wind speed determines both the distance of downward transport and the rate of dilution of pollutants. The generation of mechanical turbulence is similarly a function of the wind speed, in combination with the surface roughness.

Wind roses comprise 16 spokes, which represent the directions from which winds blew during the period. The colours reflected the different categories of wind speeds with the dotted circles indicating the frequency of occurrence, and each circle representing a 5% frequency of occurrence. The figure given in the centre of the circle described the frequency

with which calms occurred, i.e. periods during which the wind speed was below 1 m/s. Period, daytime and night-time average wind roses for Witbank are depicted in Figure 4.1.

SAWS Witbank

2006/01/01 - 2006/12/31

Wind Speed Avg (m/s) @ 10m

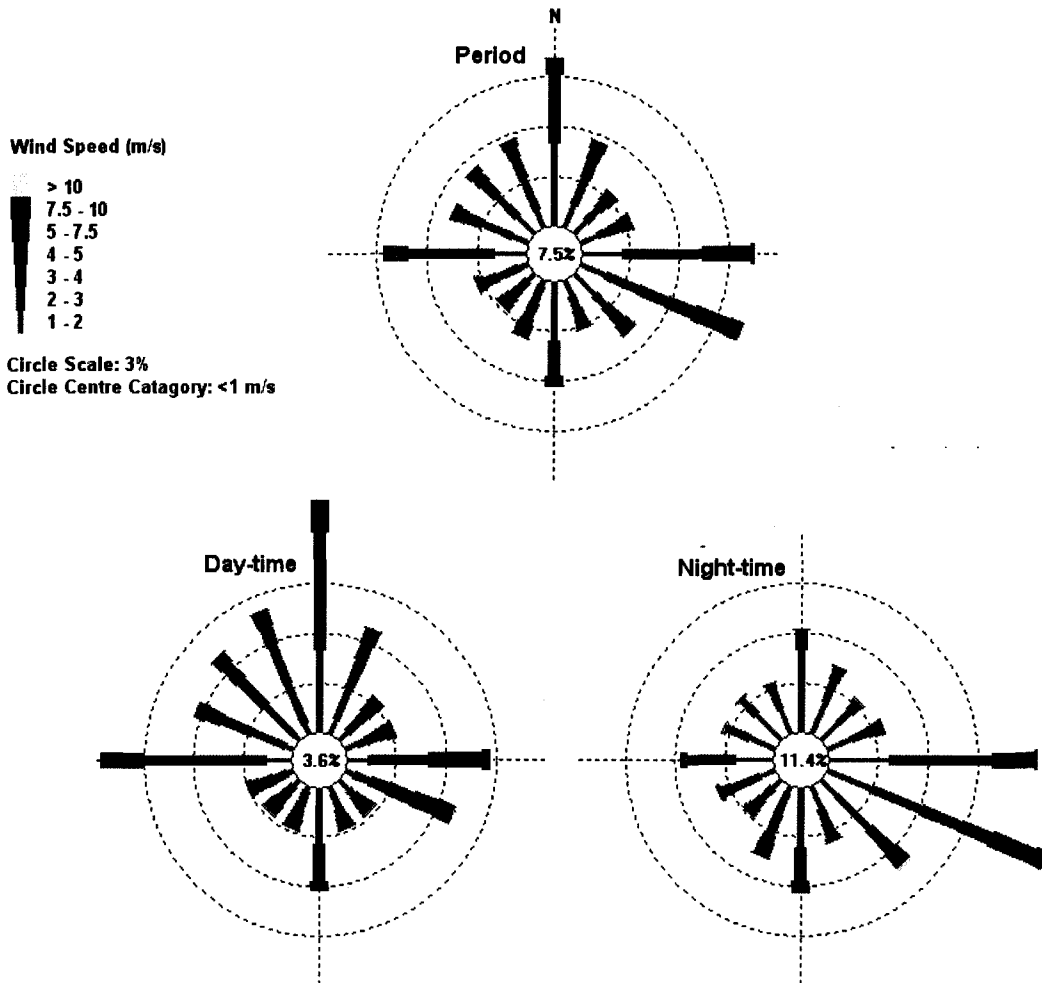


Figure 4.1: Wind roses for 2006 recorded at Witbank.

The spatial and annual variability in the wind field is clearly evident in the figure above. The predominant wind directions are northerly, easterly and east-southeasterly with a >10% frequency of occurrence. Winds from the northeasterly and southwesterly sectors are relatively infrequent occurring <5% of the total period. Calm conditions (wind speeds < 1 m/s) occur for 7.5 % of the time. A frequent northerly flow dominates day-time conditions with >15% frequency of occurrence. During the night-time an increase in easterly and east-southeasterly flow is observed with a decrease in northerly air flow.

4.2 Precipitation

Precipitation is important to air pollution studies since it represents an effective removal mechanism for atmospheric pollutants and inhibits dust generation potentials. Long-term monthly average rainfall figures for various stations within the Witbank region are depicted in Figure 4-2 below. Long-term average total annual rainfall is in the range of 730 mm to 750 mm. Rain falls mainly in summer from October to April, with the peak being in January. The number of rainfall days per month with precipitation greater than 0.1 mm and the monthly average evaporation rates (both of which are important for managing water spraying as a mitigation measure for fugitive dust) are given in tables 4-1 and 4-2. Data on extreme weather events (excessive rainfall, hail and drought) less relevant to the present study is also available, but not given here.

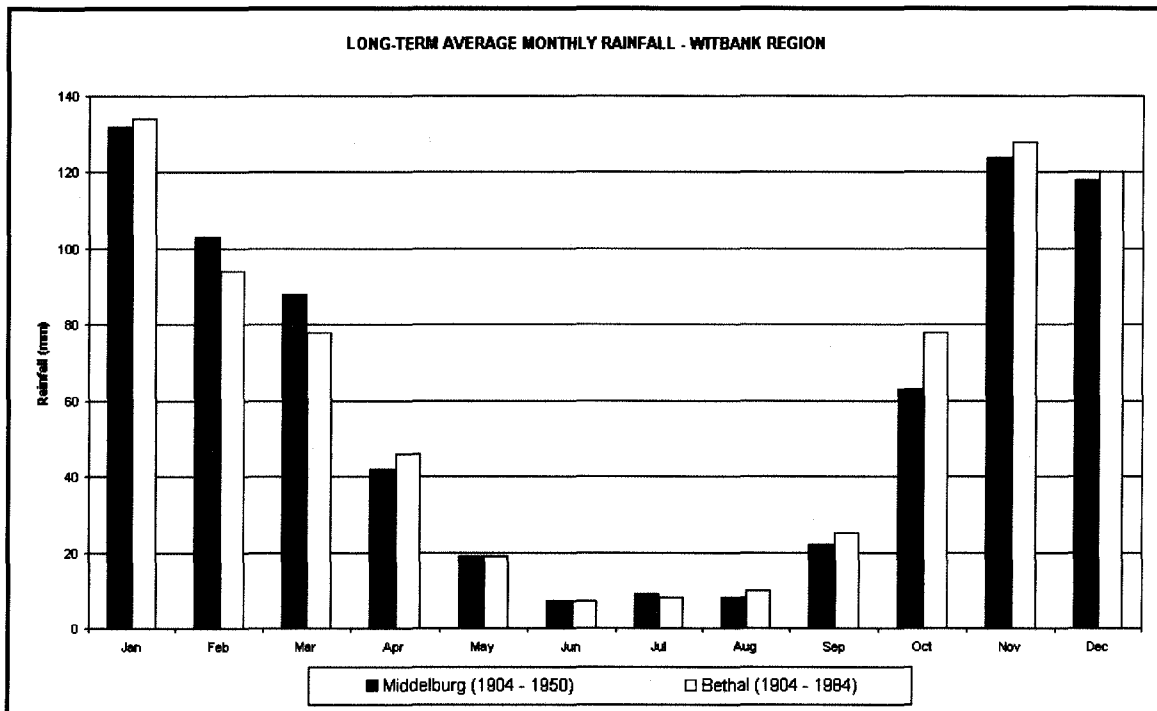


Figure 4.2 Long-term monthly rainfall for stations within the Witbank region.

Table 4-1: Long-term monthly rainfall days of measurable data (>0.1mm) as a percentage for various stations within the Witbank region.

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
Middelburg (1904 - 1950)	13.8	11.2	9.5	6.5	2.9	1.5	1.7	0.9	3.7	8.3	13.0	13.1	86.1
Bethal (1904 - 1984)	12.6	9.1	8.6	7.2	3.2	2.0	1.8	2.2	3.7	9.4	13.1	12.4	85.3

Table 4-2: Mean monthly evaporation (mm) for the Witbank region (Schulze, 1997).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
203	171	169	138	122	101	113	150	177	197	195	209

5 BASELINE AIR QUALITY

The identification of existing sources of emission in the region and their impact on existing ambient pollutant concentrations is fundamental to the assessment of the potential for cumulative impacts.

Several sources impact on the concentration of TSP and PM10 in the area in which the project is situated. These include import from biomass burning in counties north of South Africa, local veld fires (especially in late winter), the use of fuel for domestic heating and cooking purposes, mining and power generation activities.

Unfortunately no measurements of airborne fine particulate concentrations are available for the mine area and only broader regional measurement are available. Some information on background concentration of particulate matter in the Southern African region was provided by the SAFARI 2000 project, during which several overflights at 5 km altitude were made over the countries of the region. (Eatough *et al.* 2003). The average concentration of particulate matter observed from five samples collected over South Africa early in August was $18.7 \pm 3 \mu\text{g}/\text{m}^3$ and from two samples collected after 22 August (and thus presumably more impacted by biomass burning) was $42.1 \pm 3.1 \mu\text{g}/\text{m}^3$. At that altitude, it can be accepted that good mixing has taken place and that this measurement is equivalent to PM10. Individual source contributions to this figure are difficult to determine; from the composition of the samples a large contribution from biomass burning is evident. The conclusion to be drawn is that background PM10 will make up a material portion of the total PM10 in the area and that the contribution of this background PM10 to cumulative impact is season-dependent.

A modelling study to predict the ambient air quality impact of the proposed optimisation of mining in the area was carried out during 2006 (Scorgie *et al* 2006). This study provided predicted PM10 values both before and after the proposed rationalisation. These figures indicate that the highest daily value at the proposed MWRS site already exceeds the proposed SA daily PM10 standard but that the annual average values both before and after rationalisation meet the proposed SA annual standard. As highest daily values tend to occur on windy days which would also be favourable to dust generation from construction activities, this strengthens the case for the addition of dust management activities to the construction EMP.

Dustfall monitoring has been conducted by Annegarn Environmental Research (Pty) Ltd on behalf of Middelburg Mine Services for a number of years. The locations of recently operational dustfall monitoring sites are shown in Figure 5-1 and the results summarised in table 5-1. As dustfall is essentially a near-source phenomenon, results of only the closest sites (those in the northern section, more particular ND3 and possibly ND4 for the preferred site and NWD1 and NWD2 for the alternative site) will be discussed below.

Table 5-1: Measured dust deposition values (annual averages, $\text{mg}/\text{m}^2\text{-d}$).

Year	ND3	ND4	NWD1a	NWD1b	NWD2a	NWD2b
2003	127	240	73	92	234	90
2004	218	279	117	108	302	382
2005	47 (Jan-Apr only)	210	18 (Jan-Apr only)	60 (Jan-Apr only)	74	149
2006	Discontinued	216	Discontinued	Discontinued	114	173
2007	Discontinued	180	Discontinued	Discontinued	259	253

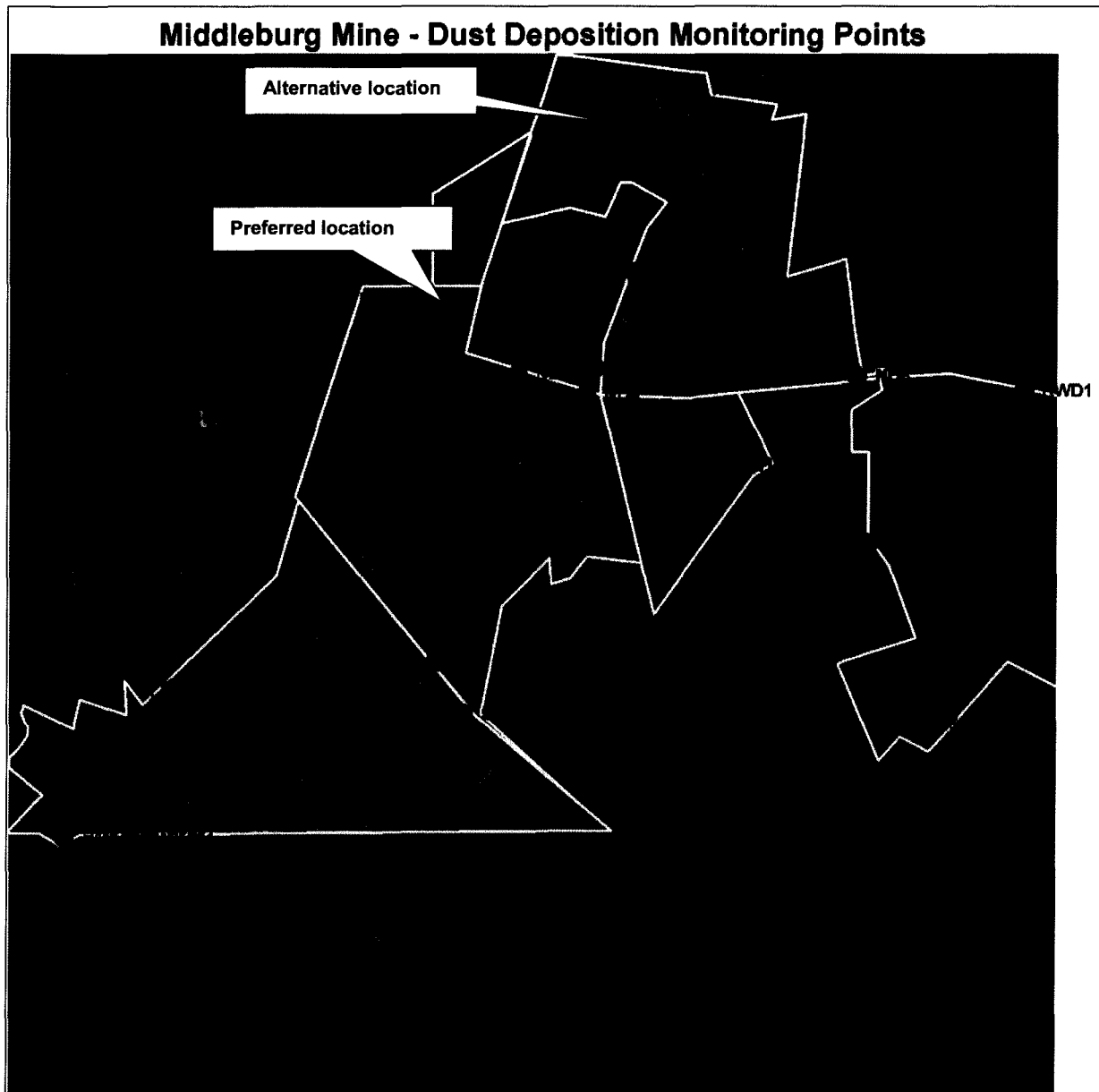


Figure 5.1 Location of dustfall monitoring sites forming part of the Middelburg Mine's dust deposition monitoring network.

For the measuring locations closest to the preferred site, the ND3 values were well within the proposed residential guideline for the period measured. ND4 has slightly higher values, but still within the proposed guideline.

For the measuring locations closest to the alternative site, directional buckets were set up in an attempt to differentiate between "exported" (the first column for each monitoring site) and "imported" deposition values (the second column). For purposes of this study, distinguishing between the results "imported" and "exported" results is not important. Again, the values (except for 2004) fall within the proposed residential guideline and support the conclusion made earlier with regard to inhalable dust viz. that long-term average values are within guidelines/standards, but that short-term exceedences may occur, either due to adverse meteorological conditions or due to short-term excessive emissions which, pertinent to this project, may include excavations, the dumping of excavated material or high traffic volumes on unpaved roads.

6 IMPACT ASSESSMENT

6.1 Construction phase

Construction of the water treatment plant itself as well as the associated brine and sludge dams will require that considerable areas will need to be cleared and excavations carried out. Similarly, the trenching and backfilling for the installation of the associated pipelines will require excavation. Such construction activities, which will also include the movement of vehicles on unpaved roads, have the potential to emit both fine (PM10) and settleable (TSP) dust additional to the background values described above. The rate of dust emission and the impact thereof on PM10 and dust deposition values will be determined by the properties of the material and the construction schedule and it is at this stage not possible to quantify the effects. They will obviously be of a temporary nature, and the EMP for construction must make provision for mitigation measures.

6.2 Operational phase

6.2.1 Plant operation

All processes are in the liquid phase and no material emissions to air are foreseen. Disinfection using chlorine gas does not under normal operational conditions give rise to emissions to air, but a potential risk exists due to the handling and storage of chlorine cylinders. A proper hazard/risk assessment should be carried out for this.

6.2.2 Sludge and brine handling.

Brine evaporation ponds will remain in the liquid phase for the operational life of the plant and will therefore have no material impact on the concentration of airborne pollutants. From the pre-feasibility investigation report, it is clear that both the wet sludge and filter cake disposal options still have a high water content in the sludge disposal dams which would to all intents and purposes eliminate emissions to air. Most probably, odour nuisance would also be minimal due to the inorganic nature of the sludge. The report also indicates that the side walls of the sludge dams would be covered with topsoil as they are built, so that even wind erosion from these side walls will be minimal, especially as the walls become vegetated.

7 CONCLUSIONS AND RECOMMENDATIONS.

7.1 Construction phase

The EMP for the construction phase needs to address the potential for dust emissions during this phase. Monitoring of the existing network of dustfall gauges during the construction period should be carried out and a spraying program instituted on the construction sites and unpaved roads and used for construction vehicles. Such a spraying program is best managed by taking cognisance of the rainfall and evaporation rates prevalent at the time. The control efficiency of various unpaved road watering rates may be estimated based on the empirical model developed by the US-EPA (EPA, 1992). This model estimates control efficiencies of watering based on: (i) average hourly daytime traffic rate, (ii) water application intensity in litres per m², (iii) time between applications, and (iv) site-specific evaporation potential. Assuming that traffic rates, evaporation potentials and the time between applications remain constant, dust control efficiencies associated with various rates of watering may be estimated.

Economical portable real-time PM10 monitors are available and should be used on the construction site of the water treatment plant to monitor water spraying programs for the major activities.

7.2 Operational phase

No material emissions to air are expected during the operational phase of the plant, provided that topsoil covering and vegetation is carried out for the sludge disposal dams as proposed in the pre-feasibility investigation (Golder Associates Africa, .2008)

A formal risk assessment on the handling and storage of stored chemicals, especially chlorine cylinders, must be carried out and compliance to the Major Hazardous Installations regulations of the OHS Act should be ensured.

8 APPENDIX A: SYNOPTIC SCALE CIRCULATION

Situated in the subtropical high-pressure belt, southern Africa is influenced by several high-pressure cells, in addition to various circulation systems prevailing in the adjacent tropical and temperate latitudes. The mean circulation of the atmosphere over the subcontinent is anticyclonic throughout the year (except near the surface) due to the dominance of three high pressure cells, viz. the South Atlantic High Pressure (HP), the South Indian HP off the east coast, and the continental HP over the interior.

Seasonal variations in the positioning and intensity of the HP cells determine the extent to which the circumpolar westerlies impact on the atmosphere over the region. In winter, the high-pressure belt intensifies and moves northward and the upper level circumpolar westerlies are able to impact significantly on the region. The winter weather of the region is, therefore, largely dominated by perturbations in the westerly circulation. Such perturbations take the form of a succession of cyclones or ridging anticyclones moving eastwards around the South African coast or across the country. During summer months, the anticyclonic belt weakens and shifts southwards and the influence of the circumpolar westerlies diminishes. A weak heat low characterises the near surface summer circulation over the interior, replacing the strongly anticyclonic wintertime circulation (Preston-Whyte and Tyson, 1988; Schulze, 1980).

The general circulation of the atmosphere over southern Africa as a whole is anticyclonic throughout the year above the 700 hPa level (i.e. altitude of ~3 000m). Anticyclones are associated with convergence in the upper levels of the troposphere, strong subsidence throughout the troposphere, and divergence in the near-surface wind field. Subsidence inversions, fine conditions and little to no rainfall occur as a result of such airflow. The climatology of the highveld region has been studied extensively in the past, where the frequency of anticyclonic conditions reaches a maximum in winter. The dominant effect of the winter subsidence is that, averaged over the year, the mean vertical motion is downward. The clear, dry air and light winds, often associated with anticyclonic circulation are ideal for surface radiation inversions of temperature, responsible for limited dispersion of especially low level pollution emissions (e.g. domestic coal fires). Surface inversions increase in frequency during nighttime and varies in depth between ~300 m to more than 500 m. The mean inversion strength during the winter is about 5°C – 6°C, whereas, in summer the strength is less than 2°C.

Circumpolar westerly waves are characterised by concomitant surface convergence and upper-level divergence that produce sustained uplift, cloud and the potential for precipitation. Cold fronts, which are associated with westerly waves, occur predominantly during winter when the amplitude of such disturbances is greatest. The passage of a cold front is characterised by distinctive cloud bands and pronounced variations in wind direction, wind speed, temperature, humidity, and surface pressure. Airflow ahead of a front passing over has a distinct north-northeasterly component and stable and generally cloud-free conditions prevail as a result of subsidence and low-level divergence. Following the passage of the cold front the north-easterly wind is replaced by winds with a distinct southerly component. The low-level convergence in the south-westerly airflow to the rear of the front produce favourable conditions for convection. Temperature decreases immediately after the passage of the front, with minimum temperatures being experienced on the first morning after the cloud associated with the front clears. Strong radiation cooling due to the absence of cloud cover, and the advection of cold southerly air combining to produce the lowest temperatures

The tropical easterlies, and the occurrence of easterly waves and lows affect most of southern Africa throughout the year, but occur almost exclusively during summer months. The easterly waves and lows are largely responsible for the summer rainfall pattern and the northeasterly wind component that occurs over the region (Schulze, 1986; Preston-Whyte and Tyson, 1988).

In contrast to anticyclonic circulation, convective activity associated with westerly and easterly wave disturbances hinders the persistence of inversions. Cyclonic disturbances, which are associated with strong winds and upward vertical air motion, destroy, weaken, or increase the altitude of elevated inversions. Easterly and westerly wave disturbances therefore facilitate the dispersion and dilution of accumulated atmospheric pollution.

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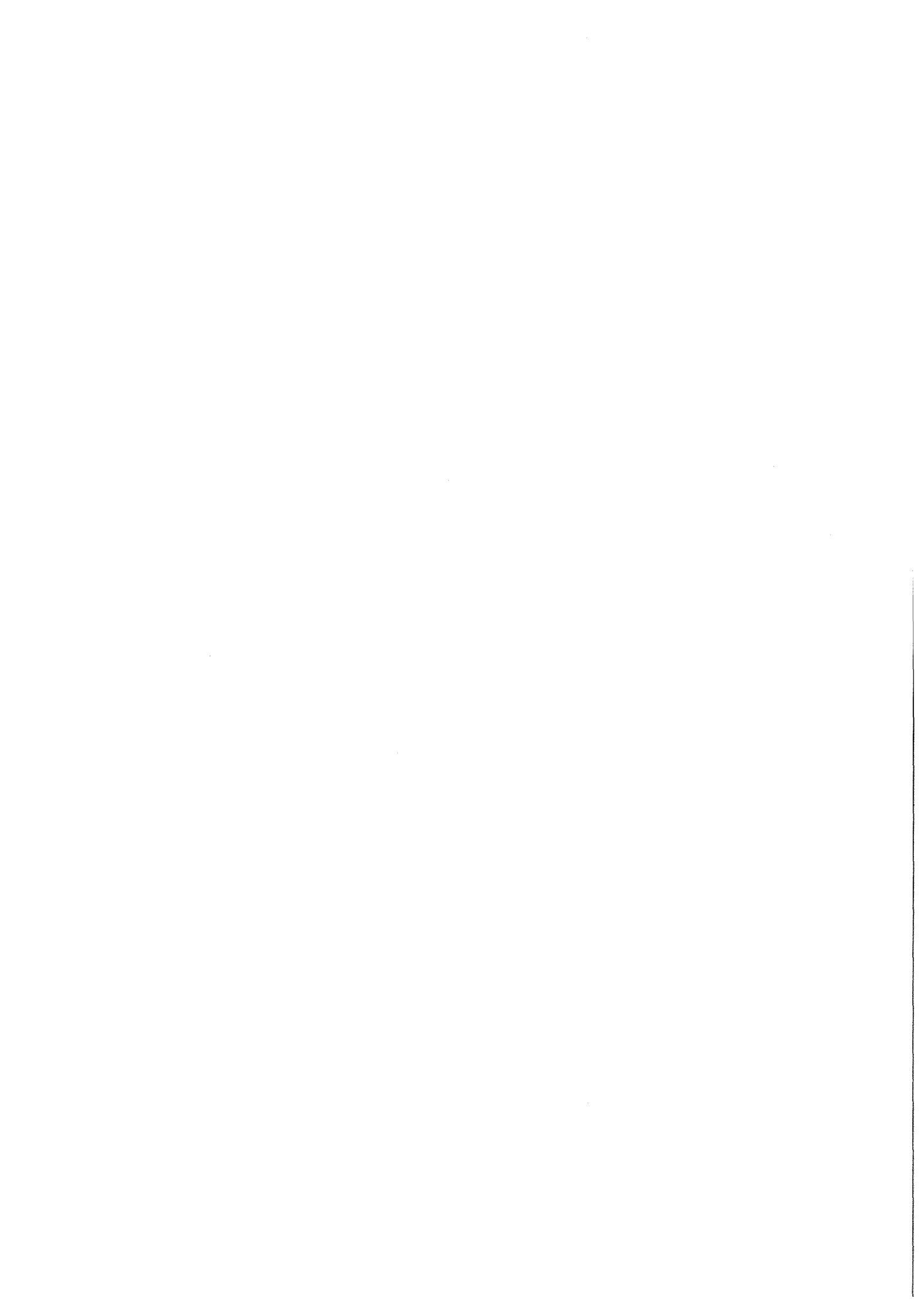
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D.2 Aquatic Impact Assessment

MIDDELBURG MINE

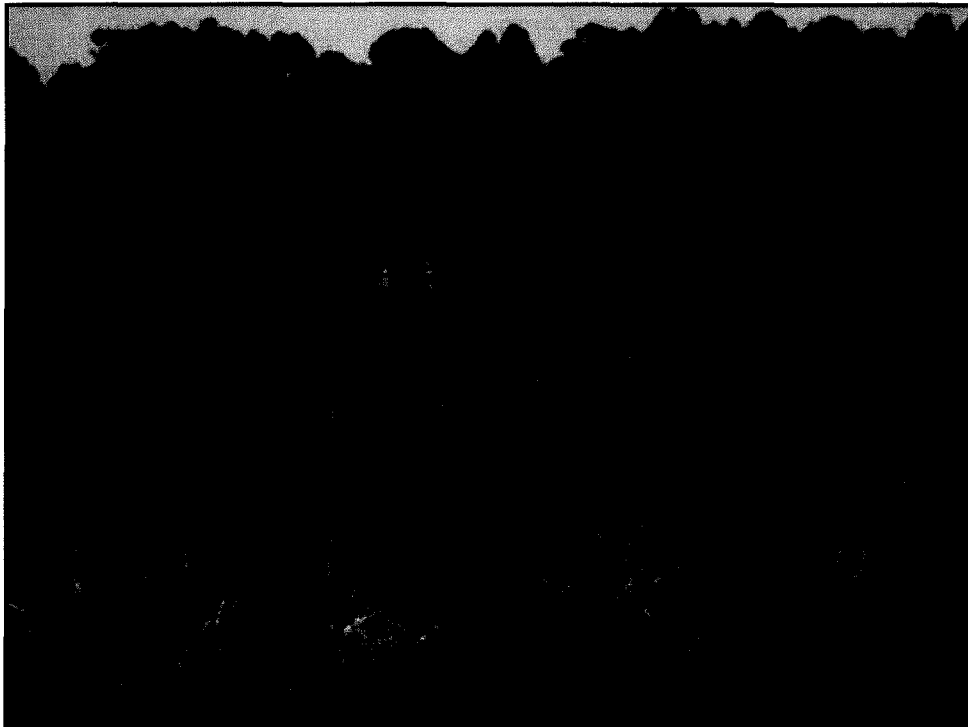
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Specialist Study

**DISCHARGE OF TREATED MINE WATER INTO THE SPOOKSPRUIT
CATCHMENT**

-
POTENTIAL IMPACTS ON AQUATIC ECOSYSTEMS

31ST August 2008

(Revised 5th November 2010)



[Niekerspruit at proposed discharge point for Option 1]

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EXECUTIVE SUMMARY

Background

This report forms part of an Environmental Impact Assessment and Water Use Licence Application for the proposed Middleburg Mine Water Treatment Plant, near Middelburg. This report concerns the impacts on aquatic ecosystems of discharging between 15 and 25ML/day of water into the Spookspruit Catchment.

Study Area

Three alternative sites for the proposed water treatment plant are under consideration. All sites are located in the middle reaches of the Spookspruit Catchment, quaternary catchment B11H, in the Olifants Water Management Area.

Methods

This study was based on a review of available reports and a field survey undertaken in July 2008. Five sampling sites were visited, and baseline SASS5 and fish biomonitoring data were collected from two sites that contained suitable biotopes. Cross-sectional stream profiles were surveyed at two sites. Field measurements were made of pH and conductivity. Impacts were rated using standard criteria (Magnitude; Reversibility; Duration; Spatial Extent; Probability and Overall Significance)

Baseline Assessment

The cross-sectional profile of the Niekerspruit is about 80 m wide, and the gradient is gentle. The increased flows are unlikely to increase the risks of erosion within this stream, except for the point of discharge.

The main channel of the Spookspruit is about 3 m wide, and while the regional stream slope is gentle, there are local erosion nick points where the gradients are steep, and current speeds are fast (0.8 m/s). The increased flows are expected to increase the risks of erosion within this stream.

Flow patterns in the receiving streams are highly modified from natural flows. Baseflows appear to be significantly higher than natural.

Spot readings of conductivity and very low diversity of aquatic invertebrates, despite good availability of instream biotopes, indicate that the water quality is very poor.

No fish were recorded in the area, although six species are expected to have occurred in the area under natural conditions.

The Present Ecological State of the Spookspruit Catchment is rated as Critically Modified (Category E/F). The stream channel is structurally in good condition, and the main problem appears to be poor quality water.

Potential Impacts and Mitigation

The potential impacts and recommended mitigation of the proposed developments are summarised in Table A. Positive impacts include an improvement of water quality from current conditions, and an associated improvement in instream biodiversity. Negative impacts include possible encroachment of reeds, and increased erosion at existing erosion nick points within the Spookspruit, as well as the point of discharge. Mitigation measures include:

- *Monitor Erosion, particularly after storm events*
- *Monitor Water Quality - monthly for key variables, and annually for comprehensive suite of variables*
- *Annual SASS5 biomonitoring*
- *Re-introduce indigenous fish upstream of weir B1H002 if water quality and biomonitoring results indicate significant improvement, which is expected*
- *Discharge water into well-field located on hillslope adjacent to stream, instead of into the stream directly. This is expected to create an artificial hillslope seepage wetland, and will avoid the problems associated with point discharge. A specialist study of the geohydrology in the proposed receiving area is recommended.*

Options

Option 1 would have the advantage of significantly improving the water quality, and therefore the ecological functioning and biodiversity support, of the Niekerspruit to its confluence with the Spookspruit, a distance of about 600 m. Other than that, there is no significant difference of the three alternative sites in terms of their potential impact on the receiving stream.

Table A. Summary and rating of the main impacts of the proposed Water Treatment Plant on the receiving aquatic ecosystems, before and after mitigation. The overall significance of detrimental impacts is highlighted in colour.

Potential Impact	Environmental significance before mitigation								MITIGATION	Environmental significance after mitigation							
	M	R	D	E	C	P	TOTAL	S		M	R	D	E	C	P	TOTAL	S
Improved Water Quality	4	1	1	2	2	5	50	+ Low	Monitor	3	1	1	2	2	5	45	+ Low
Increased Biodiversity	4	1	1	2	2	4	40	+ Low	Biomonitor	4	1	1	2	2	4	40	+ Low
Reed Encroachment	3	3	3	2	2	-3	-39		Nothing	3	3	3	2	2	-3	-39	
Increased Erosion	3	4	5	2	2	-3	-48		Monitor; Aquifer Recharge	2	4	5	2	2	-2	-30	

M=Magnitude or Severity; R=Reversibility; D=Duration; E=Extent; C=Context; P=Probability; S=Significance