

## Appendix 1: Authority Correspondence

13/09/2012

Department of Minerals and Resources (DMR)  
Private Bag A1  
Klerksdorp  
2570.

To Phumudzo Nethwadzi

**Authority Notification: Environmental Authorisation Processes for the proposed Re-processing of Anglo American Platinum's Waterval Tailings Storage Facilities located in Rustenburg, North West Province**

1. Notification

Anglo American Platinum Limited: Rustenburg Platinum Mines Limited (RPM) proposes the re-processing of Waterval Tailings Storage Facilities (TSF's) located within the mine lease area of RPM in Rustenburg. WSP Environment and Energy (WSP) have been appointed to conduct the environmental authorisation processes required for the proposed development.

According to the Mineral and Petroleum Resources Development Act (No. 20 of 2002) (MPRDA), RPM are required to undergo an environmental management programme (EMPR) amendment process. Thus, notification of an Environmental Impact Assessment (EIA) and an Environmental Management Programme Amendment process is hereby given.

2. Project Background

The Waterval TSFs (East and West dams) were previously used to deposit tailings material from mineral processing operations. Following tests conducted on the Waterval tailings, latent reserves have been identified that warrant the re-processing of the tailings material. The re-processing of the Waterval TSFs, including associated infrastructure, was authorised by the Department of Minerals and Energy (now the Department of Mineral Resources – DMR) as part of an amendment to the existing EMPR in 2002. Although authorised, the re-processing of the Waterval tailings has not yet commenced and recent changes to proposed infrastructure and the layout of the project require the 2002 EMPR to be amended. Additionally, some of the changes involve activities for which environmental authorisation from the North West Provincial Department of Economic Development, Environment, Conservation and Tourism (NWDEDECT) will be required. For further detail please refer to the *Background Information Document* contained within the presentation package (Including detailed GIS maps).

3. Proposed Activities and Authorisation processes required

According to the MPRDA, RPM are required to undergo an EMPR Amendment Process as portions of the proposed project fall within the RPM mine lease area.

In addition, the undertaking of certain listed activities requires environmental authorisation in accordance with the National Environmental Management Act No. 107 of 1998, as amended (NEMA), Government Notice Regulation (GN. R) 544 and 545.

The activities listed in GN. R 544 associated with the proposed project include:

- Activity 9;
- Activity 10;
- Activity 11 (iii);
- Activity 18 (i);
- Activity 22;
- Activity 23; and
- Activity 47.

**WSP Environmental (Pty) Ltd**  
WSP House  
Bryanston Place  
199 Bryanston Drive  
Bryanston, 2021  
Tel: +27 (0)11 361 1380  
Fax: +27 (0)11 361 1381  
<http://www.wspenvironmental.co.za>  
Reg. No: 1995/08790/07

WSP Group plc  
Offices worldwide

The activity listed in GN. R 545 associated with the proposed project is:

- Activity 6 (ii): The construction of facilities or infrastructure for the bulk transportation of dangerous goods – in liquid form, outside an industrial complex, using pipelines, exceeding 1000 metres in length, with a throughput capacity of more than 50 cubic metres per day.

Application for environmental authorisation for activities listed in GN. R 545 requires that a Scoping and EIA process be undertaken, as such, an application in this regard was submitted to NWDEDECT on 21 Sept 2012.

Furthermore, the proposed pipeline route will cross a watercourse, and a proposed pollution control dam and an emergency slurry catchment dam will be constructed. The following water use activities listed under Chapter 4, Section 21 of the National Water Act (No. 38 of 1998) (NWA) may be relevant and may require authorisation in the form of a general authorisation or new/amended Water Use License:

- 21 (c): impeding or diverting the flow of water in a watercourse,
- 21 (i): altering the bed, banks, course or characteristics of a watercourse, and
- 21 (g): disposing of waste in a manner which may detrimentally impact on a water resource.

#### 4. Public Participation Process

WSP are to undertake a transparent and comprehensive public participation process in accordance with GN. R 543 of NEMA, Section 10 of the MPRDA and section 3 of the GN. R 26275 (MPRDA). WSP will ensure that all Interested & Affected parties are given sufficient opportunity to voice comments, concerns and/or queries relating to the project. WSP will ensure that the DMR is informed of any and all outcomes of the process. Please do not hesitate to contact the undersigned should you have any queries.

Regards,



Jared O'Brien

Consultant

Tel: 011 361 1396

Fax: 086 505 3939

Email: Jared.O'Brien@wspgroup.co.za

# MEETING NOTES



WSP Environment & Energy South Africa  
 WSP House  
 Bryanston Place  
 199 Bryanston Drive  
 Bryanston  
 2191  
 Tel: +27 11 361 1384  
 Fax: +27 86 556 9717  
 www.wspenvironmental.co.za

Project Title	
Date	13/09/2012
Time	14:00-15:00
Venue	Vaal University of Technology Building, c/o Voortrekker & Margaretha Prinsloo Streets, Klerksdorp, 2570.
Subject	DMR Notification Meeting
Present	Catherine Greengrass (CG); Alex Kinmont (AK); Nishi Haripursad (NH) and Phumudzo Nethwadzi (PN)
Apologies	N/A
Attachments	Appendix A – Meeting Presentation Appendix B – Attendance Register

MATTERS ARISING	ACTION
<b>Welcome and Team Introductions</b>	
CG introduced the attendees and thanked all for attending the meeting	
<b>Topics Discussed</b>	
<p>1. <u>General Matters</u></p> <p>CG indicated that WSP has submitted an environmental authorisation application form to the NW DEDECT in terms of NEMA due to certain activities falling outside of the mine lease area. CG explained that the purpose of the current meeting is to inform the DMR of the environmental authorisation process to be undertaken. CG indicated that she will submit the scoping report to the DMR once complete for the Departments subsequent review.</p>	N/A
<p>2. <u>Project location</u></p> <p>NH indicated by the use of an A2 project layout locality map where each of the major components of the project lie.</p>	N/A

MATTERS ARISING	ACTION
<p>3. <u>Presentation</u></p> <p>CG ran through the presentation as indicated in <i>Appendix A</i>. The following points were discussed in additional detail and have therefore been indicated below.</p> <ul style="list-style-type: none"> <li>■ NH added to the project description by indicating that Klipfontein is to come to the end of its life in the near future. As such, Anglo intend to re-process the tailings material from the Waterval Tailings Storage Facilities (TSF). The tailings material will be pumped via a pipeline (AK described the route which will be followed by the pipeline) to the Western Limb Tailings Retreatment Facility. PN questioned the final destination of the tailings which will result from the process. NH and CG explained that the tailings will be transferred via an existing pipeline to the Hoedspruit TSF, which has the capacity to store all the tailings material resulting from the process. AK further described that the height of the Hoedspruit TSF will need to be increased to accommodate the Waterval tailings material. PN queried the need to upgrade the Hoedspruit TSF in terms of the structure of the facility. CG responded indicating that the project team is investigating the structural upgrade requirements.</li> <li>■ CG indicated that a pollution control dam (PCD) will be constructed for the project. CG indicated (within the presentation) that a WUL amendment may be required for the project however, the WUL will include the said river crossings and not the PCD due to the volume being under the legislated capacity.</li> <li>■ CG described the proposed public participation process which WSP intent to undertake. PM responded by emphasising the need to be very comprehensive in the process to ensure that all stakeholders are included to avoid public issues at a later stage in the project. PN added that WSP should address all the potential anticipated social and environmental impacts which may arise as a result of the project.</li> </ul> <p>4. <u>Additional points raised by PN</u></p> <ul style="list-style-type: none"> <li>■ PN stated that WSP need to ensure that continuous correspondence is maintained with the Department to avoid unnecessary delays of the process.</li> <li>■ PN put emphasis on the quality of information provided in environmental reporting. He explained the need to ensure that all the information provided is relevant to the project, concise and auditable.</li> </ul> <p>5. <u>Current unrest in the mining industry</u></p> <p>CG raised the current unrest in the mining industry as a point of concern. CG asked for advice for PN on the approach WSP is to undertake in terms of public participation. PN responded indicating that the current situation on the ground will settle down over time. PN indicated that he does not believe the unrest will impact on the public participation process as the majority of people who will be engaged will be members of the general public and not necessarily members of Anglo or any other mining organisation. PN went on to say that public unrest cannot be ruled out during the process and the team must ensure that appropriate risk assessments are conducted prior to going to site.</p>	<p>N/A</p> <p>N/A</p> <p>WSP</p> <p>WSP</p> <p>WSP</p> <p>Anglo/ WSP</p>
<b>Close Meeting</b>	
CG indicated the meeting closed	
Distribution: All Present	





### **Appendices**

**Appendix A – Meeting Presentation**

**Appendix B – Attendance Register**

## DMR NOTIFICATION MEETING 13 SEPTEMBER 2012

### THE PROPOSED RE-PROCESSING OF THE WATERVAL TAILINGS STORAGE FACILITIES AT RPM ATTENDANCE REGISTER

Name	Company	Designation	Contact details (Tel/Fax/Email)				Signature
Nishi Hainpursad	Anglo Rect	Env. P.	Tel: 014 598 2169 / 0834638919	Fax: -	Email: nishi.hainpursad@anglorectmex.com		
Mex Kinnmont	TWP	Project Manager	Tel: 082 806 0577	Fax: -	Email: alexkinnmont@twp.co.za		
Jared O'Brien	WSP	Assistant Environmental Consultant	Tel: 0184579830	Fax: -	Email: -		
Peterwadi	DMR	DD: MEM	Tel: 0184879830	Fax: 0184879830	Email: -		
			Tel: -	Fax: -	Email: -		
			Tel: -	Fax: -	Email: -		

Your ref: Re-mining of Waterval Tailings Storage Facilities (TSFs) Rustenburg, North West Province  
Our ref: 28006



20 August 2012

Attention: Mr. NS Mukhola (Office E10)

Department of Agriculture, Conservation, Environment and Rural Development  
Agricentre Building  
Cnr. Dr. James Moroka & Stadium Road  
Mmabatho  
2735

Dear Mr Mukhola

**Application Form: Environmental authorisation process proposed Re-mining of Waterval Tailings Storage Facilities (TSFs) Rustenburg, North West Province.**

Please find attached herewith five copies (one original and four photocopies) of the required application form submitted on behalf of the proponent, Anglo American Platinum: Rustenburg Platinum Mines Limited, for the proposed Re-mining of Waterval Tailings Storage Facilities (TSFs) Rustenburg, North West Province.

Should you have any queries, please do not hesitate to contact the undersigned

Yours faithfully

A handwritten signature in black ink, appearing to read 'Catherine Greengrass', written over a light blue horizontal line.

**Catherine Greengrass**  
**Senior Consultant**

Tel: 011 361 1395

Email: [catherine.greengrass@wspgroup.co.za](mailto:catherine.greengrass@wspgroup.co.za)

**WSP Environmental (Pty) Ltd**  
WSP House  
Bryanston Place  
199 Bryanston Drive  
Bryanston, 2021  
Tel: +27 (0)11 361 1350  
Fax: +27 (0)11 361 1351  
<http://www.wspenvironmental.co.za>  
Reg. No: 1995/08750/07

**WSP Group plc**  
Offices worldwide



the DEDECT

Department:  
**Economic Development, Environment, Conservation and Tourism**  
North West Provincial Government  
**Republic of South Africa**

Agricentre Building  
Cnr. Dr. James Moroka &  
Stadium Road  
Private Bag X2039,  
Mmabatho. 2735

**DIRECTORATE: ENVIRONMENTAL  
QUALITY & PROTECTION**

Tel: (018) 389 5959/ 5156  
Fax: (018) 389 5006  
Smukhola@nwpg.gov.za

**APPLICATION FORM FOR ENVIRONMENTAL AUTHORISATION**

	(For official use only)
File Reference Number:	
NEAS Reference Number:	
Date Received:	

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

**PROJECT TITLE**

The re-mining of the Anglo American Platinum, Waterval Tailings Storage Facilities (TSFs) located in Rustenburg, North West Province (refer to Locality Maps – Appendix 1)

**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 application must be handed in at the offices of the relevant competent authority as determined by the Act and regulations.
7. No faxed or e-mailed applications will be accepted.
8. 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.



Queries must be addressed to the contact hereunder:

**Departmental Details/Provincial Authority**

**Postal address:**

Department of Agriculture, Conservation, Environment and Rural Development  
 Attention: Director: Environmental Quality and Protection  
 Private Bag X2039  
 Mmabatho  
 2735

**Physical address:**

Department of Agriculture, Conservation, Environment and Rural Development  
 Agricentre Building  
 Cnr. Dr. James Moroka & Stadium Road  
 Mmabatho  
 2735

Queries should be directed to the Directorate: Environmental Quality and Protection at:

Tel: 018-389 5959/5156  
 Fax: 018-389 5006

Applications to be couriered for attention Mr. NS Mukhola Office E10

**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.

T	0	J	Q	0	0	0	0	0	0	0	0	0	2	9	8	0	0	0	0	0
T	0	J	Q	0	0	0	0	0	0	0	0	0	2	9	8	0	0	0	1	9
T	0	J	Q	0	0	0	0	0	0	0	0	0	2	9	8	0	0	0	0	5
T	0	J	Q	0	0	0	0	0	0	0	0	0	2	9	9	0	0	0	2	3
T	0	J	Q	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	2
T	0	J	Q	0	0	0	0	0	0	0	0	0	3	0	2	0	0	0	0	0
T	0	J	Q	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	1	5
T	0	J	Q	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	4	6
T	0	J	Q	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	9
T	0	J	Q	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	4	7
T	0	J	Q	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	1	3

T	0	J	Q	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	1	0
T	0	J	Q	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	0
T	0	J	Q	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	1	9

(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

The re-mining of the Anglo American Platinum, Waterval TSFs located in Rustenburg, North West Province.

### 1. BACKGROUND INFORMATION

Project applicant:	Anglo American Platinum: Rustenburg Platinum Mines Limited		
Trading name (if any):	Anglo Platinum Management Services (Pty) Ltd		
Contact person:	Danie Vermaak		
Physical address:	WLTR Plant, Rustenburg, South Africa.		
	25° 41' 15.55" S 27° 23' 49.62" E		
Postal address:	P.O. Box 8202, Rustenburg.		
Postal code:	0300	Cell:	+27 83 4550967
Telephone:	+27 14 598 3422	Fax:	-
E-mail:	danie.vermaak@angloamerican.com		
Landowner:	Refer to Appendix 2 for property and landowner information		
Contact person:			
Postal address:			
Postal code:			
Telephone:			
E-mail:			
	In instances where there is more than one landowner, please attach a list of landowners with their contact details to this application.		
Local authority in whose jurisdiction the proposed activity will fall:	Rustenburg Local Municipality		
Nearest town or districts:	Rustenburg Rural		
Contact person:	Kelebogile Mekgoe		
Postal address:	-		
Postal code:	-	Cell:	-
Telephone:	014 590 3185	Fax:	014 590 3070
E-mail:	kmekgoe@rustenburg.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.		
	N/A		

## 2. ACTIVITIES APPLIED FOR TO BE AUTHORISED

### Brief project Description

Anglo American Platinum: Rustenburg Platinum Mines (RPM) is situated in Rustenburg, in the North West Province. The Waterval TSFs (West and East TSFs), which are positioned in the RPM lease area, are located 4 km's east of the town of Rustenburg, 1.5 km's west of Bokamoso, 3.5 km's North of Waterkloof and 3.5 km's South of Boitekong. The Waterval TSFs were previously used to discard tailings material resulting from mineral processing operations. Following tests conducted on the TSFs, latent reserves have been identified that warrant the re-mining of the tailings dams. The re-mining of the Waterval TSFs was authorised in 2002 however, there have been changes to proposed infrastructure and the layout of the project, which require an amendment to the EMPR (2002) and environmental authorisation. In addition to this, the NEMA listed activities came into effect after 2002 and will therefore require authorisation before commencement. NEMA activities have been indicated in the table below.

The re-mining process involves the use of hydraulic hoses, which sluice the mining face. The resulting slurry collects in a sump via a system of drains or launders. The slurry will then be pumped (via a proposed pump station and pre-treatment plant) through a proposed pipeline to the Western Limb Tailing Retreatment (WLTR) Plant at which point the minerals contained in the tailings material will be extracted from the slurry. The WLTR Plant was initially constructed to retreat tailings material from the Klipfontein TFS, which are located 6km's south east of the Waterval TFSs. The re-mining of the Klipfontein TSF is expected to reach completion in 2015, at which point the re-mining of the Waterval TSFs will need to be initiated.

The process, design and layout changes to the re-mining of the Waterval TSFs project include: the addition of 4 new IsaMills™ within Mainstream Inert Grinding (MIG) applications in the WLTR Plant facility; an alteration to the location of the proposed pump station with the inclusion of a pre-treatment plant; the construction of one booster pump station along the pipeline, an amendment to the proposed pipeline route and the construction of a pollution control dam (PCD) and other associated infrastructure. An amendment to the height of the Hoedspruit TSF is also proposed. A detailed project description will be included in the Scoping Report.

WSP Environmental and Energy (WSP) has been appointed as the independent environmental assessment practitioner (EAP) to facilitate the stakeholder engagement process and undertake the required environmental authorisation process.

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 project description<sup>1</sup>:

GNR 544, 18 June 2010	9 (i) (ii)	<p>The construction of facilities or infrastructure exceeding 1000 metres in length for the bulk transportation of water, sewerage or storm water-</p> <ul style="list-style-type: none"> <li>(i) With an internal diameter of 0.36 metres or more; or</li> <li>(ii) With a peak throughput of 120 litres per second or more,</li> </ul> <p>Excluding where:</p> <ul style="list-style-type: none"> <li>a. Such facilities or infrastructure are for bulk transportation of water, sewerage or storm water or storm water drainage inside a road reserve; or</li> <li>b. Where such construction will occur within urban areas but further than 32 metres from a watercourse, measured from the edge of the watercourse.</li> </ul> <p>The proposed development entails the construction of a slurry pipeline and a return water pipeline between the Waterval tailings and the Western Limb Tailings Retreatment Plant (WLTR).</p>
GNR 544, 18 June 2010	10	<p>The construction of facilities or infrastructure for the transmission and distribution of electricity (i) outside urban areas or industrial complexes with a capacity of more than 33 kV but less than 275 kV; or (ii) inside urban areas or industrial complexes with a capacity of 275 kV or more.</p> <p>Power lines may need to be relocated/extended in order to bring power to a proposed pre-treatment facility.</p>
GNR 544, 18 June 2010	11 (iii)	<p>The construction of bridges where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.</p> <p>The proposed slurry pipeline will cross watercourses at three different points on route to the WLTR plant.</p>
GNR 544, 18 June 2010	18 (i)	<p>The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock or more than 5 cubic metres from watercourse.</p>

<sup>1</sup> Please note that this description should not be a verbatim 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

		The proposed pipeline may cross a watercourse. This will be investigated in the EIA process.
GNR 544, 18 June 2010	22	The construction of a road, outside urban areas, I. With a road reserve wider than 13.5 metres or, II. Where no reserve exists where the road is wider than 8 metres.  Access roads may be required. This will be determined in the EIA.
GNR 544, 18 June 2010	23	The transformation of undeveloped, vacant or derelict land to- (i) Residential, retail, commercial, recreational, industrial or institutional use, inside an urban area, and where the total area to be transformed is 5 hectares or more, but less than 20 hectares, or (ii) Residential, retail, commercial, recreational, industrial or institutional use, outside an urban area, and where the total area to be transformed is bigger than 1 hectare but less than 20 hectares.
GNR 544, 18 June 2010	47	The widening of a road by more than 6 meters, or the lengthening of a road by more than 1 kilometre – (i) where the existing reserve is wider than 13.5 meters; or (ii) where no reserve exists, where the existing road is wider than 8 meters – excluding widening or lengthening occurring inside urban areas.  Existing roads may need to be upgraded.
GNR 545, 18 June 2010	6	The construction of facilities or infrastructure for the bulk transportation of dangerous goods – I. In gas form, outside an industrial complex, using pipelines, exceeding 1000 metres in length, with a throughput capacity of more than 700 tons per day; II. In liquid form, outside an industrial complex, using pipelines, exceeding 1000 metres in length, with a throughput capacity of more than 50 cubic metres per day; or III. In solid form, outside an industrial complex, using funiculars or conveyors with a throughput capacity of more than 50 tons per day.

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

### 3. SOCIO-ECONOMIC BENEFITS

3.1 What is the expected capital value to be contributed for North West Province Growth Domestic Product?

The total cost of the project is valued at R1 274 078 148.

3.2 How many new employment opportunities will be created in the development phase?

Information pertaining to employment will be provided as part of the Scoping and EIA process.

3.3 How many permanent employment opportunities will be created during operational phase?

Information pertaining to employment will be provided as part of the Scoping and EIA process.

### 4. OTHER AUTHORISATIONS REQUIRED

4.1 DO YOU NEED ANY AUTHORISATIONS IN TERMS OF ANY OF THE FOLLOWING LAWS?

- |                                                              |        |
|--------------------------------------------------------------|--------|
| 4.1.1 National Environmental Management: Waste Act           | Yes/No |
| 4.1.2 National Environmental Management: Air Quality Act     | Yes/No |
| 4.1.3 National Environmental Management: Protected Areas Act | Yes/No |
| 4.1.4 National Environmental Management: Biodiversity Act    | Yes/No |
| 4.1.5 Mineral Petroleum Development Resources Act            | Yes/No |
| 4.1.6 National Water Act                                     | Yes/No |
| 4.1.7 National Heritage Resources Act                        | Yes/No |
| 4.1.8 Other (please specify)                                 | Yes/No |
| 4.2 Have such applications been lodged already?              | Yes/No |

## 5 ACTIVITY POSITIONS

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.

List alternative sites, if applicable.

Alternative:	Latitude (S):			Longitude (E):		
Alternative S1 <sup>2</sup> (preferred or only site alternative)	25°	38'	12.25"	27°	18'	34.98"
Alternative S2 (if any)						
Alternative S3 (if any)						

**NOTE: The coordinates above are for the Waterval TSFs, where the main activity remaining will occur. Refer Appendix 1 for the locations of all other project infrastructure.**

**Alternatives will be investigated during the Scoping and EIA Process and information will be provided in Scoping and EIA Report.**

### In the case of linear activities:

**Pipeline Route - Alternative (Preferred):**      Latitude (S):      Longitude (E):

Alternative S1 (preferred or only route alternative)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

• Starting point of the activity	25°	38'	22.25"	27°	18'	40.01"
• Middle/Additional point of the activity	25°	40'	10.25"	27°	21'	09.43"
• End point of the activity	25°	41'	07.39"	27°	23'	51.38"

**Alternatives will be investigated during the Scoping and EIA Process and information will be provided in the Scoping and EIA Report.**

<sup>2</sup> "Alternative S..." refer to site alternatives



6. DECLARATIONS

6.1 The Applicant

I D.J.R. Vermaak declare that I -

- am, or represent<sup>6</sup>, the applicant in this application;
- have appointed an environmental assessment practitioner to act as the independent environmental assessment practitioner for this application<sup>7</sup>;
- 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 applicant<sup>8</sup>/ Signature on behalf of the applicant:



Name of company (if applicable):

D. J. R. VERMAAK

Date:

08/08/2012

<sup>6</sup> If this is signed on behalf of the applicant, proof of such authority from the applicant must be attached.

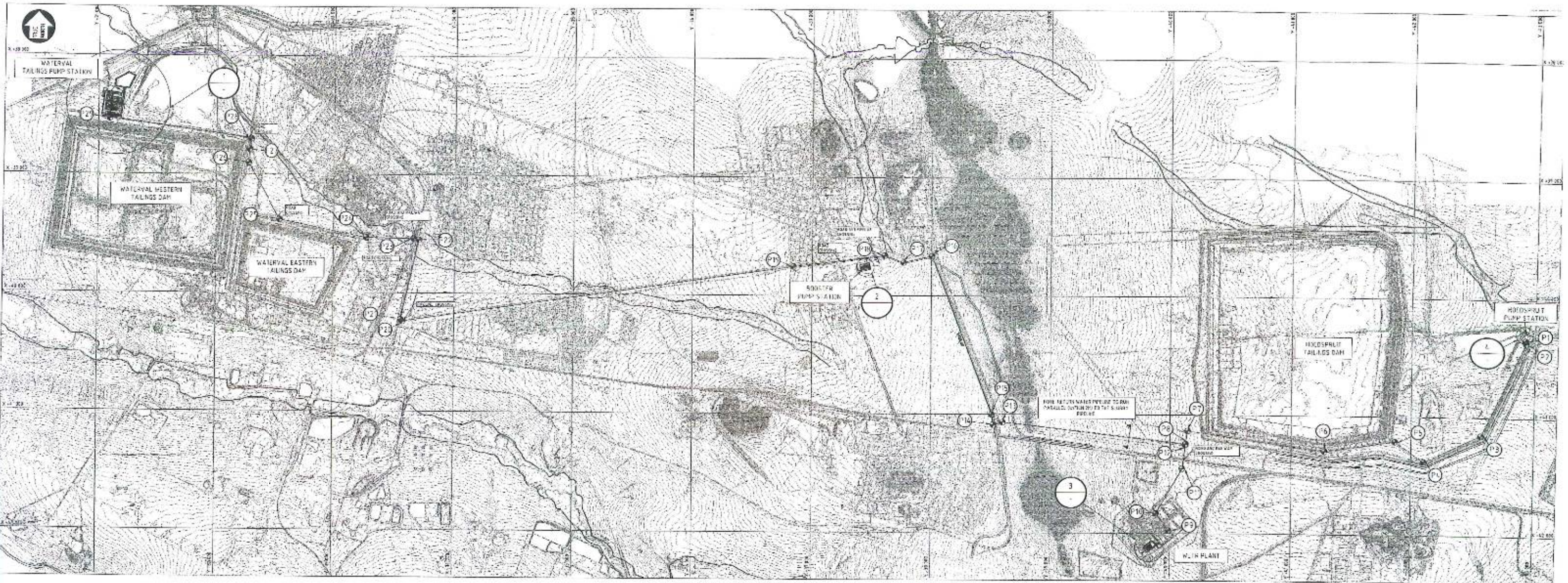
<sup>7</sup> If exemption is obtained from appointing an EAP, the responsibilities of an EAP will automatically apply to the person conducting the environmental impact assessment in terms of the Regulations.

<sup>8</sup> If the applicant is a juristic person, a signature on behalf of the applicant is required as well as proof of such authority. An EAP may not sign on behalf of an applicant.

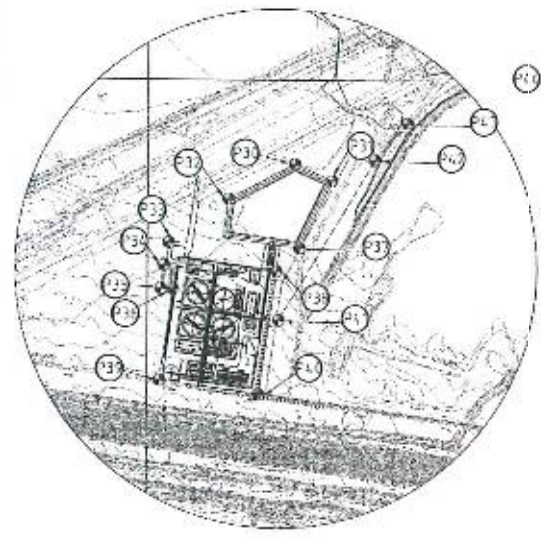
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## APPENDIX 1: LOCALITY MAPS

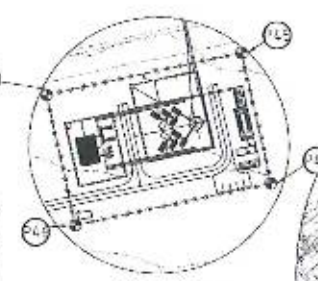
- Drawing showing project area, with proposed infrastructure
- Locality map showing the project area showing property boundaries (without proposed new infrastructure)



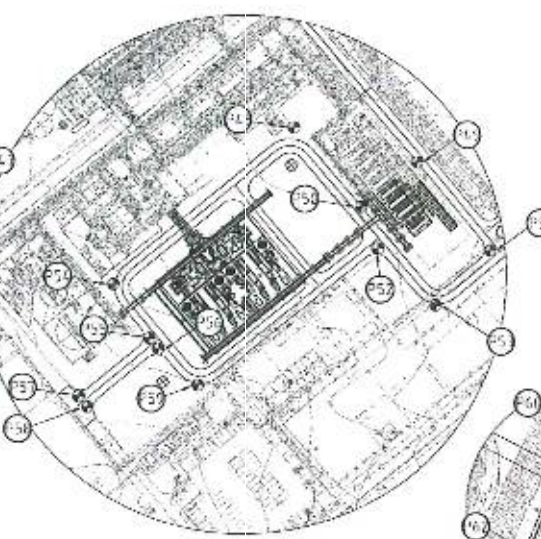
PLAN LAYOUT OF PROJECT AREAS  
SCALE 1:10000



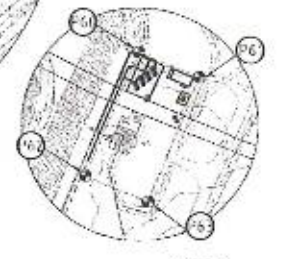
DETAIL 1  
SCALE 1:1000  
WATERVAL RETREATMENT PLANT



DETAIL 2  
SCALE 1:1000  
BOOSTERS PUMP STATION



DETAIL 3  
SCALE 1:1000  
WATER TREATMENT CONCENTRATOR PLANT



DETAIL 4  
SCALE 1:1000  
HOODSPRUIT PUMP STATION

RETURN PROCESS WATER PIPE LINE CO-ORDINATES

POINTS	CO-ORDINATES
P1	X = 4291.98 Y = -4099.81
P2	X = 4292.23 Y = -4099.68
P3	X = 4299.54 Y = -4152.74
P4	X = 4267.69 Y = -4127.13
P5	X = 4183.23 Y = -4121.90
P6	X = 4173.86 Y = -4129.43
P7	X = 4196.88 Y = -4152.33
P8	X = 4075.07 Y = -4194.84

NOTE: RETURN WATER PIPE LINE FROM HOODSPRUIT RUNS PARALLEL TO THE SLURRY PIPE LINE FROM F-15 POINT ON

SLURRY PIPE LINE CO-ORDINATES

POINTS	CO-ORDINATES
P9	X = 3990.31 Y = -4197.57
P10	X = 3983.31 Y = -4181.75
P11	X = 4070.29 Y = -4105.65
P12	X = 4012.81 Y = -4124.70
P13	X = 3982.46 Y = -4109.29
P14	X = 3923.90 Y = -4108.11
P15	X = 3855.58 Y = -4099.44
P16	X = 3896.68 Y = -4062.20
P17	X = 3715.78 Y = -3977.62
P18	X = 3708.82 Y = -3966.21
P19	X = 3684.84 Y = -3974.11
P20	X = 3255.74 Y = -4075.73
P21	X = 3253.30 Y = -4074.70
P22	X = 33108.90 Y = -39948.87
P23	X = 33064.58 Y = -39518.10
P24	X = 33373.88 Y = -39531.22
P25	X = 33543.97 Y = -39279.93
P26	X = 33717.53 Y = -39302.87
P27	X = 32719.74 Y = -38788.16
P28	X = 32251.91 Y = -38700.34
P29	X = 31894.49 Y = -38522.44

DETAIL 1 WATERVAL RETREATMENT PLANT CO-ORDINATES

POINTS	CO-ORDINATES
P30	X = 3124.61 Y = -3514.245
P31	X = 3131.39 Y = -3512.25
P32	X = 3137.79 Y = -35263.52
P33	X = 3126.42 Y = -35138.91
P34	X = 31628.55 Y = -3417.59
P35	X = 31722.92 Y = -35158.66
P36	X = 31543.58 Y = -35158.66
P37	X = 31258.32 Y = -35207.51
P38	X = 31215.12 Y = -35127.53
P39	X = 31014.27 Y = -35157.99
P40	X = 31188.37 Y = -35239.03
P41	X = 31222.95 Y = -35118.6
P42	X = 31188.81 Y = -35136.35
P43	X = 31422.26 Y = -35131.09

DETAIL 2 BOOSTERS PUMP STATION CO-ORDINATES

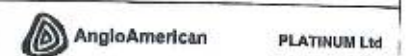
POINTS	CO-ORDINATES
P44	X = 3187.91 Y = -39736.10
P45	X = 31483.89 Y = -39779.51
P46	X = 31410.51 Y = -39751.01
P47	X = 31492.93 Y = -39775.47

DETAIL 3 WLR CONCENTRATOR PLANT CO-ORDINATES

POINTS	CO-ORDINATES
P48	X = 39823.70 Y = -4254.05
P49	X = 39905.88 Y = -4258.61
P50	X = 39882.15 Y = -42047.94
P51	X = 39936.49 Y = -42106.20
P52	X = 39883.74 Y = -42155.60
P53	X = 39913.18 Y = -42179.95
P54	X = 39777.70 Y = -42171.87
P55	X = 39193.65 Y = -42164.97
P56	X = 39194.62 Y = -42164.91
P57	X = 39191.11 Y = -42170.07
P58	X = 39166.99 Y = -42174.67
P59	X = 39013.11 Y = -42164.32

DETAIL 4 HOODSPRUIT PUMP STATION CO-ORDINATES

POINTS	CO-ORDINATES
P60	X = 42971.67 Y = -40240.37
P61	X = 42945.68 Y = -40258.59
P62	X = 42895.81 Y = -40301.30
P63	X = 42925.13 Y = -40492.70



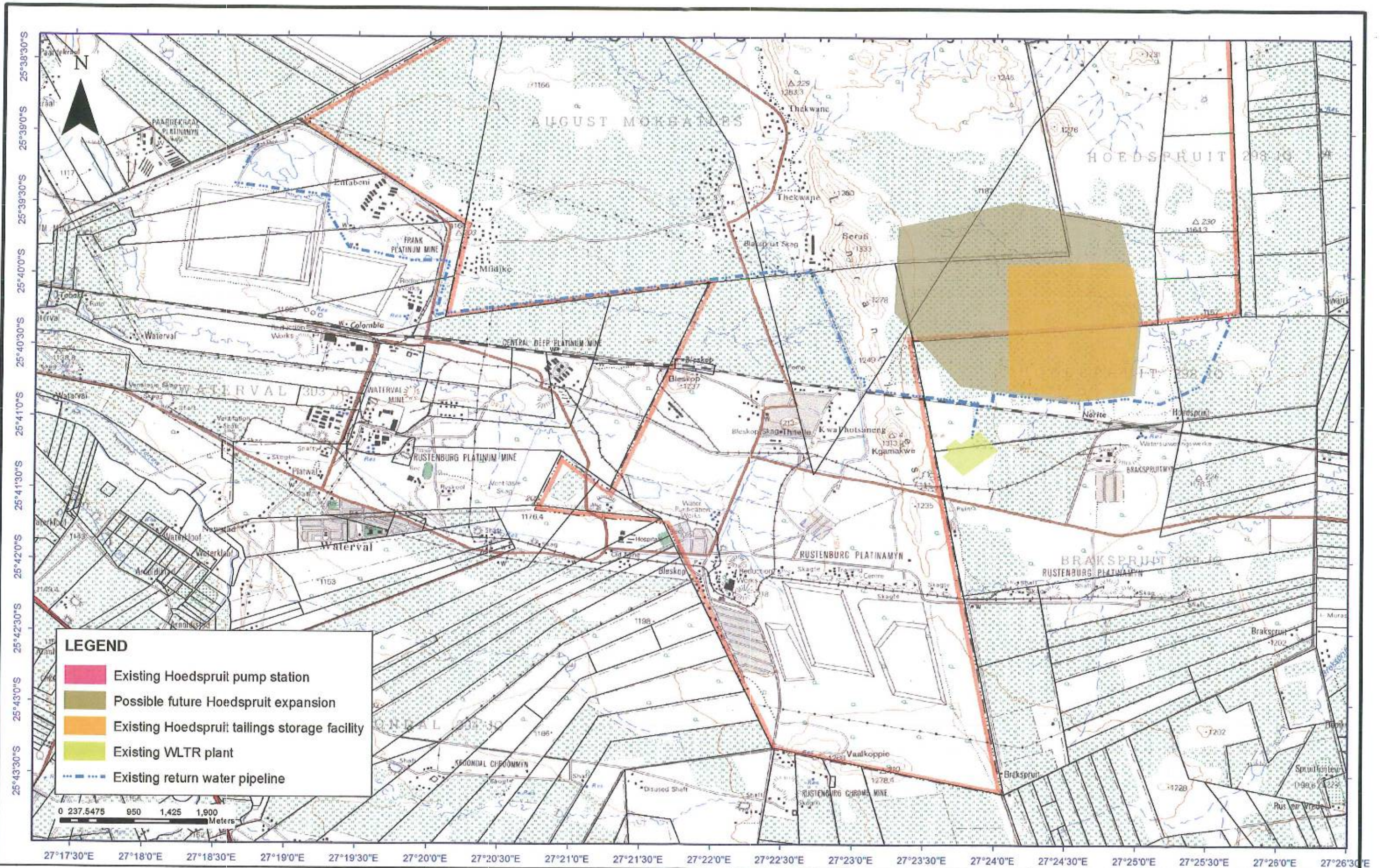
DRAWING NO.	REFERENCE DRAWINGS	DRAWING NO.	REFERENCE DRAWINGS	REV. NO.	DATE	REVISIONS	BY	CHKD.	REV. NO.	DATE	REVISIONS

PROJECT TITLE: WATERVAL TAILINGS  
WLR - REMEDIATION WATERVAL  
FELS BACKSTOPPING & WATER RECOVERY  
CENTRAL PROJECT AREA CO-ORDINATES LAYOUT

PROJECT NO: 01.TW.04

DATE: 01.11.2014

SCALE: AS SHOWN



**Anglo American Platinum Limited**  
**Rustenburg Platinum Mines**  
 Locality map

**Data Source:**  
 The Chief Directorate of Survey & Mapping  
 1:50 000 Topographical map series: 2527CB

**Project:** Western Limb Tailings Retreatment Plant  
**Drawn by:** G. Beneke  
**Reviewed by:** C. Greengrass  
**Date:** 20 August 2012

**Scale:**  
 1:62,000  
**Sheet No.**  
 28006-01

**Client:** Anglo American Platinum  
**Projection:** Lo27cf (GCS Cape)



## APPENDIX 2: AFFECTED PROPERTY OWNER INFORMATION

Landowner:	Anglo American Platinum: Rustenburg Platinum Mines Limited		
Contact person:	Andre Britz		
Postal address:	Anglo Platinum Limited, CENTRAL SERVICES, Klipfontein Main Offices, Bleskop Road, Rustenburg, South Africa.		
Postal code:	0300	Cell:	+27 (0) 83 455 8874
Telephone:	+27 (0) 14 598 1109	Fax:	+27 (0) 14 598 1153
E-mail:	andre.britz@angloamerican.com		

Landowner:	Royal Bafokeng Administration		
Contact person:	Modisaotsile Mokate		
Postal address:	PO Box 1 Phokeng South Africa		
Postal code:	0335	Cell:	
Telephone:	+27 (0) 14 566 1200	Fax:	
E-mail:	Modisaotsile.Mokate@bafokeng.com		

Landowner:	Fike Trust		
Contact person:	George Khunou, Managing Director		
Postal address:	PO Box 1, Phokeng, South Africa		
Postal code:	0335	Cell:	083 653 5621
Telephone:	014 566 0000	Fax:	014 566 1296
E-mail:	<a href="mailto:george@bafokengsports.co.za">george@bafokengsports.co.za</a>		



**the DEDECT**

Department:  
**Economic Development, Environment, Conservation and Tourism**  
North West Provincial Government  
**Republic of South Africa**

Agricentre Building  
Cnr. Dr. James Moroka &  
Stadium Road  
Private Bag X2039,  
Mmabatho, 2735

**DIRECTORATE: ENVIRONMENTAL  
QUALITY & PROTECTION**

Tel: (018) 389 5959/ 5156  
Fax: (018) 389 5006  
Smukhola@nwpg.gov.za

**DETAILS OF EAP AND DECLARATION OF INTEREST**

	(For official use only)
File Reference Number:	
NEAS Reference Number:	
Date Received:	

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

**PROJECT TITLE**

The re-mining of the Anglo American Platinum, Waterval Tailings Storage Facilities (TSFs) located in Rustenburg, North West Province

Environmental Assessment Practitioner (EAP): <sup>1</sup>	WSP Environment and Energy (Pty) Ltd		
Contact person:	Catherine Greengrass		
Postal address:	PO Box 5334, Rivonia		
Postal code:	2128	Cell:	079 501 5303
Telephone:	011 361 1395	Fax:	086 86 240 0693
E-mail:	Catherine.greengrass@wspgroup.co.za		
Professional affiliation(s) (if any)	N/A		

Project Consultant:	TWP Projects (pty) Ltd		
Contact person:	Alex Kinmont		
Postal address:	PO Box 61232, Marshalltown		
Postal code:	2107	Cell:	082 806 0577
Telephone:	011 218 3472	Fax:	0861 897 329
E-mail:	akinmont@twp.co.za		

#### 4.2 The Environmental Assessment Practitioner

Catherine Greengrass

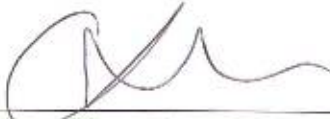
I, \_\_\_\_\_, declare that –

General declaration:

- I act as the independent environmental practitioner in this application
- 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 ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;
- **I will keep a register of all interested and affected parties that participated in a public participation process; and**
- **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;**
- ***will perform all other obligations as expected from an environmental assessment practitioner in terms of the Regulations; 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.**

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;



Signature of the environmental assessment practitioner:

**WSP Environment and Energy (Pty) Ltd**

Name of company:

**2012 08 20**

Date:



Signature of the Commissioner of Oaths:

Date:

20/8/2012

CA (SA)

Designation:

Official stamp (below)

COMMISSIONER OF OATHS  
Johan Janse van Rensburg CA (SA)  
Commissioner of Oaths (RSA)  
8 Orchard Avenue, Bordeaux  
Randburg 2194, South Africa



## Appendix 2: WSP Capability Statement



## WSP Environment & Energy Capability Statement

UNITED  
BY OUR  
DIFFERENCE



# CORPORATE PHILOSOPHY, STRUCTURE AND SERVICES

## Our Vision

Our vision is to provide an independent, innovative and professional service whereby we strive to achieve a balance between environmental protection, social desirability and economic development.

WSP Environment & Energy (WSP) is a leading South African environmental consultancy with a broad range of expertise and over 20 years experience in the regional environmental market. Whilst we are operated by WSP Environmental Ltd, a global environment and energy consultancy listed on the London Stock Exchange (WSP Group plc), we are also committed to transformation in our operational region having achieved Level 4 BEE compliance in South Africa. As part of a global business we provide the regional marketplace with a dynamic blend of local and global expertise.

WSP's Environment and Energy has offices in Durban, Cape Town, Johannesburg and Pietermaritzburg. WSP is owned by WSP Group Africa Ltd, a 900-member strong subsidiary of WSP Group plc, an international FTSE 250 management, engineering and built environment consultancy, with 10,000 employees worldwide, which is listed on the London Stock Exchange. As part of WSP Group, we have access not only to a broad range of environmental and sustainability specialists, but to leading international engineers across the full range of disciplines: energy, electrical, civil, and structural, among others.

WSP has received a number of international awards for our contribution to sustainable development including the Acquisitions Monthly Environmental Advisor of the Year Award for 2010, and the Winner of the 2009 and 2010 Big Tick Award for Climate Change, awarded by the Prince of Wales's Business in the Community charity, based upon our global climate change consulting services to clients.





## Our Values

- Trust
- Sharing and Supporting
- Pride and Passion
- Sustainability
- Innovation

By incorporating our principles of Trust, Sharing and Support, Pride and Passion, Sustainability and Innovation into our day to day operations, we are able to deliver an independent, insightful and professional service to our clients to achieve a balance between environmental protection, social desirability and economic development.

Stronger regulatory control, market pressures, stakeholder awareness and global concerns, have caused businesses to adopt an innovative, proactive approach to the evaluation of environmental issues. The provision of sound environmental advice is therefore becoming an essential ingredient for progressive business management and success. By fully understanding our clients business, associated operations and requirements, and combining this knowledge with our strong legal and technical competence we are able to provide our clients with sound strategic advice and improved environmental performance.

We pride ourselves on our reputation for delivery and technical excellence and provide a broad range of environmental and energy related services across a range of economic arenas including the industrial, mining, financial, tourism and public sectors.

## STAFF WELFARE

Creating the optimum social and environmental framework for staff is essential if we are to attract and retain the intellectual capital that sets our business apart from our competitors. We actively promote capacity building through staff and knowledge transfers between our international offices.



# OUR SERVICES

WSP brings to the South African marketplace a dynamic blend of local expertise and global cutting-edge technology. Being part of a large global company, we are also able to draw on considerable international resources and expertise accumulated over many years.

We have a well established team of environmental scientists and our team can provide a range of environmental solutions to businesses in the following fields:

- Air Quality Management
- Asbestos Surveys
- Climate Change Adaptation and Mitigation Strategies
- Contaminated Land and Remediation
- Corporate Social Responsibility
- Due Diligence, Compliance and Liability Audits
- Energy Efficiency and Management
- Energy Project Development and Investment
- Environmental Engineering
- Environmental Management Systems
- Environmental Project Management
- Human Health and Ecological Risk Assessment
- Environmental Toxicology
- Environmental Training
- Geotechnical Investigations
- Groundwater Monitoring and Modelling
- Integrated Environmental Management
- Public Participation Programs
- Renewable Energy
- Surface Water Hydrology
- Sustainability Management Systems
- Sustainability Reporting
- Sustainable Solutions
- Waste Engineering
- Waste Management, Waste Characterisation and Delisting




There is a growing awareness that if an organisation or project is to succeed in the 21st century it will need to meet new challenges by working in partnership with key stakeholders and integrating social and environmental factors into business decisions alongside the more traditional economic issues. We deliver proactive sustainability solutions, offering real business benefits, which include reducing operating costs, protecting corporate reputations and meeting stakeholder aspirations in society.

## CORPORATE SUSTAINABILITY

Our key capabilities and services include the following:

- Corporate Sustainability Strategy, Reporting and Verification
- Benchmarking Tools (e.g. Sustainability Assessment Technique)
- Sustainability and Value Management Systems
- Corporate Governance and Communicating with Stakeholders (King and Turnbull Reports)
- Community Enhancement and Corporate Citizenship
- Teambuilding and Employee Volunteering Programmes
- Green Procurement
- Energy Efficiency, Renewable Energy and Climate Change Strategies
- Waste Management and Eco-labelling
- Local, Regional and National Strategy Planning (e.g. Local Agenda 21 policy and plans)

Our Sustainability Assessment Technique (SAT) is designed to visually represent the assessment, and superimposed onto it are the impacts associated with a development. Used throughout the project life cycle, it will identify the threats and opportunities associated with the development.



A changing climate threatens those businesses that cannot adapt in an efficient manner. How businesses adapt can influence the longevity and profitability of your business. WSP assesses the climate change risk to business using holistic outlook taking into account economic, social and environmental factors. Incorporating business resilience, resistance and continuity plans will ensure your business can react positively to a business interruption and will be in a far better position to prevent, survive, prosper and gain an advantage over less prepared competitors.

## CLIMATE CHANGE ADAPTATION AND MITIGATION STRATEGIES

WSP offers an integrated approach to business climate risk management, utilising global expertise across all spheres. Our offering can be adapted to meet the needs of your business.

Our basic capabilities include the following:

- Climate Risk and Opportunity Assessments
- Detailed Carbon Inventory Analyses
- Business Adaptation Strategy
- Assisting with Carbon Disclosure Project (CDP) responses
- Renewable Energy and Energy Efficiency
- Carbon finance services:
  - Assisting with access to specialised finance for sustainable energy investments.
  - Carbon Credit projects (Kyoto CDM, voluntary market etc.)
  - Supporting client transactions via carbon offset market.

## FOOTPRINTING SERVICES

Responding to climate change can be best perceived as a journey, starting with Greenhouse Gas (GHG) inventory and acquiring an understanding your organisation's climate change risks. Further development of this response includes exploring the broader environmental impacts of products and embedding sustainability of one's of climate change specialists, but experts across various environmental disciplines, including sustainability, toxicology, ecology and waste management. WSP are specialists in the field of footprinting – from life cycle assessments for Apple's Macbook laptops, water footprinting for GlaxoSmithKline, ecological footprinting for the City of London or carbon emissions modelling for the South African recycled oil industry, we have a proven track record in developing solutions to our clients' sustainability needs.

WSP's footprinting services include:

- Comprehensive Product Life Cycle Assessment (LCA)
- End-to-End Carbon Footprinting and Carbon Labelling (PAS2050 methodology)
- Water Footprinting
- Ecological Footprinting



Understanding energy usage and potential efficiency gains within a business or industry sector is becoming increasingly important in a world of tightening legislative requirements and increased pressure from governments and business shareholders to lower carbon emissions resulting from production processes. We are able to operate in close co-operation with the WSP Energy Africa group and Green Buildings Business of WSP, and in house engineering teams to provide energy advice on efficiency options in line with the needs of individual business requirements.

## ENERGY MANAGEMENT AND EFFICIENCY

### Our integrated services include:

- Energy risk analysis
- Process alternatives assessment
- Business, industry or country specific assessments of energy efficiency potential
- Development of solution implementation plans

### Specialist services offered by WSP Green Building Services include:

- Sustainability in the built environment consultants
- Consulting to professional team to assist in designing sustainable buildings
- Facilitate and administer Green Star accreditation process
- Architectural, urban and engineering background





Integrated Environmental Management (IEM) covers all aspects of environmental management in the project life cycle, from planning and design, to construction, operations, decommissioning and closure.

## INTEGRATED ENVIRONMENTAL MANAGEMENT

We offer environmental services appropriate to all project phases such as:

- Risk assessments and fatal flaw analyses
- Scoping studies
- Route/site/process alternatives assessment
- Public participation programmes
- Environmental impact assessments
- Environmental management plans
- Environmental management programmes
- Environmental monitoring of construction and operational activities
- Closure plans

Our studies are all conducted according to the regulatory frameworks of the countries in which we operate, so that we can obtain regulatory approval for our clients. Internationally funded projects are carried out in the manner specified by the lending agency and to world standards of best environmental practice.

In particular, we have experience in the following business sectors:

- Mining
- Infrastructure development (power lines, pipelines, roads, telecommunications)
- Building construction
- Manufacturing
- Industry
- Eco-tourism
- Water development projects
- Waste disposal
- Community development



Public participation involves a process resulting in improved decision-making. The process should lead to a joint effort by stakeholders, technical specialists, the authorities and the proponent who work together to produce more informed decisions.

Strong and independent facilitation, coupled with the necessary empathy for people's concerns, is required during meetings with stakeholders. At times, it is necessary to direct stakeholder concerns to the authorities rather than to the proponent.

## STAKEHOLDER ENGAGEMENT

WSP offers comprehensive stakeholder engagement services, which include the following:

- Design of public participation processes
- Identification of stakeholders
- Compilation and maintenance of stakeholder databases
- Co-ordination and facilitation of public meetings, stakeholder workshops, multi-sectoral meetings and Open Houses/Days
- Compilation of proceedings of meetings and verification of issues
- Compilation of issues trails
- Liaison with authorities, clients and stakeholders to facilitate negotiations
- Report compilation detailing public participation process on projects

WSP provides strategic advice and operational support to a range of clients across five continents. We strongly believe that our team is at the forefront of Environmental Systems (EMS) in a way, which integrates environmental issues into existing business systems and operations.

## ENVIRONMENTAL MANAGEMENT SYSTEMS AND TRAINING

In particular we can offer the following services:

- Raising awareness and providing information on the full range of EMS approaches and recognised standards (e.g. EMAS, ISO 14001:2004 series, OHSAS 18000 etc)
- Advanced training for EMS implementation and auditing
- System design, gap analysis and implementation on specific projects including the development of procedures
- Auditing throughout the development of an EMS and identification of the potential for system improvement and pre-preparation audits
- Development and review of legal registers
- Software based implementation tools and training
- Supply chain management protocols and coaching programmes
- Certified EMS Implementation Training Course
- Certified EMS Internal Auditors Training Course

Our EMS Team can draw on experience of EMS work across a broad range of economic sectors including: construction, manufacturing (e.g. BMW), mining, financial services, government agencies and departments and office based organisations.



The Air Quality Unit (AQU) offers in-depth experience in all phases of air quality management, from calculation of emissions inventories, developing and implementing monitoring programs, air quality modelling in support of Environmental Impact Assessments or permit applications to designing pollution abatement strategies and emission control systems.

## AIR QUALITY MONITORING AND DISPERSION MODELLING

State of the art equipment, coupled with strategic modelling and risk assessment techniques enable WSP to evaluate problems accurately and engineer workable solutions to complex and potentially costly environmental issues.

### Our core air quality management services include:

- Source, fence line and ambient air quality monitoring
- Air emissions inventories
- Atmospheric source-dispersion modelling
- Meteorological monitoring and data analysis
- Best practical available technology assessment
- Pollution controls system and cost-benefit analysis
- Quantitative health risk assessments for hazardous air pollutants
- Occupational health and safety monitoring
- Greenhouse emissions and carbon footprinting



The Contaminated Land Unit (CLU) in WSP offers consulting services, ranging from site assessment and investigation through to risk assessment, and contracting services ranging from environmental remediation and on-going monitoring to regulatory compliance and sign-off. At present, clean-up contracts can be planned as procured services via a tender process with WSP CLU acting as consultants or on the basis of a turnkey design and supply project.

## LAND RESTORATION AND GROUND ENGINEERING

### CONSULTING SERVICES:

- Contaminated land and geohydrological assessments
  - Desk top and feasibility studies
  - Full ground investigations
  - Design, implementation and management of groundwater monitoring systems
  - Soil and groundwater sampling and monitoring for organic and inorganic contaminants
  - Geohydrological and contaminant plume modelling
- Human health and risk assessment
  - Quantitative and qualitative risk assessment
  - Source, release mechanism, pathway receptor relationships
  - Determination of the need for remediation
  - Determination of site-specific remediation, goals and targets
  - Waste management
- Waste management strategy development
  - Waste classification, hazard rating and delisting
  - Landfill site assessment and investigation
  - Waste treatment option assessments
- Surface water hydrology
  - Surface water management plans
  - Runoff modelling
  - Water balances
  - Floodline assessments
  - Water licensing and water use registrations
  - Reserve determination
- Geotechnical investigations
  - Infrastructure and development
  - Foundation design engineering

### CONTRACTING SERVICES:

WSP offers a full service remediation business, local and international, with a solution driven approach to remediation projects of all sizes and types.

We have a track record in negotiated settlements of environmental contamination issues and provide an integrated technical, financial, legal and environmental service to ensure the right solution.

Services include:

- Site investigations
- Land option appraisals
- Commercial risk evaluation
- Material classification and treatment studies
- Technical and financial feasibility studies
- Laboratory and field trials
- Risk-based remediation design
- Regulatory authority consultation
- Remediation contracting



## LIABILITY TRANSFER

The outsourcing of environmental liabilities using Active Transfer™ allows a business to eliminate environmental liabilities without losing control of its assets. WSP is partnered with Willis and is capable of providing risk management, environmental engineering and financial modelling to provide a cost effective and permanent solution.

## DUE DILIGENCE, COMPLIANCE AND PRE-ACQUISITION AUDITING

As southern Africa becomes more and more part of the 'Global Village', increased awareness of environmental liabilities facing business and the risks associated with sub-standard environmental performance, will intensify. Our auditing services are designed to assess all the environmental risks and liabilities associated with commercial and industrial businesses and their assets, including identifying any latent environmental damage, regulatory non-compliance and third party liabilities.

## ENVIRONMENTAL FINANCE

WSP advises on business and project risks presented by environmental and operational issues. Using quantitative techniques favoured by financial analysts, models and forecasts are generated to assess, for example, the cost of environmental liabilities, asset impairment issues, or the impacts of future regulation and policy on the project or business enterprise.

We can therefore quantify risk, whether adverse or positive, in monetary terms and develop financial tools that when integrated with technical solutions from other parts of the business, lead to the development of a total risk management solution. This manifests itself in the implementation of strategies ranging from basic control measures through to elaborate financing tools, such as captive insurance and alternative risk transfer (ART).



The WSP is utilising its expertise in environmental sustainability and the built environment to provide consulting advice to clients on optimal planning / urban design for sustainable outcomes. WSP, along with traffic engineers, housing specialists and economists, have been involved with the development of Local Area Plan (LAP) projects for various municipalities within South Africa.

## SUSTAINABLE MASTERPLANNING

Our client offerings within this field include:

- Environmental guidance from conceptual planning to detailed design.
- Development Risk Assessment, Including 'No-go' Options.
- Strategic Environmental Impact Assessment & Identification of opportunities.
- Development Parameters Assessment.
- Integrated Assessment GIS and Mapping.
- Land-use management (LUMs) advice.
- Project implementation plans.



# CONTACT US:

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## Appendix 3: Process Design Criteria

**ANGLO PLATINUM MANAGEMENT SERVICES  
CONCENTRATOR TECHNOLOGY DIVISION**

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**PROCESS DESCRIPTION:**

**Western Limb Tailings Retreatment Plant – Phase 2  
Re-Mining of the Waterval East and West Tailings Dams**

<b>DOCUMENT DETAILS</b>	
Revision number:	A
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Compiled & Issued by:	R Fouchee
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## 1. General

**This process description is for FEL3, which is only a feasibility study. Modifications to this are likely prior to final design and construction.**

The Western Limb Tailings Retreatment (WLTR) Plant was constructed to treat dormant tailings dump material from the Rustenburg Section tailings dumps. The plant was commissioned in December 2003, treating material from the Klipfontein Tailings Dam. The Klipfontein Tailings Dam will be depleted in mid-2015. This document outlines the design criteria for the retreatment of the Waterval East and West Tailings Dams, thereby extending the life of WLTR Plant by approximately 16 years.

The aim of this project is to utilise the existing WLTR Plant, which would otherwise become redundant, to retreat the Waterval East and West Tailings Dams at a rate of 500ktpm. The plant currently treats 450ktpm. Furthermore, the aim of the project is to increase the WLTR Plant's existing PGM recoveries through the installation of Mainstream Inert Grinding (MIG) using proven IsaMill™ technology. The inclusion of MIG was optional during FEL 2, but is included going forward due to the substantial financial benefit it adds to the project.

The project will entail the following at the Waterval East and West Tailings Dams re-mining site and pump station:

- Hydraulic re-mining with all its associated activities
- Installation of a pump station with buffer capacity for improved stability and a water reticulation circuit.
- Additional water pumping capacity from Hoedspruit return water dam

In order to reduce the capital required for this project, some equipment has been deferred. Due to its streamlined design, none of the MIG equipment has been affected by the cost saving initiative. For a proposed flowsheet, please refer to the Appendix.

Space is still provided for the deferred equipment in the layout, but it will be clearly marked and referred to as future options. For a provisional layout as done in FEL2, please refer to the Appendix.

## 2. Safety and Risk Assessment

All equipment and plant will be designed, installed and modified strictly in accordance with the Mines Health and Safety Act, OHS Act, and relevant Anglo Platinum Safety, Health and Environment standards. All equipment, plant design and construction activities will comply with the Anglo Fatal Risk

Standards. Provision will be made for fire fighting equipment (hand-held fire extinguishers, fire hydrants, hose pipes etc.) where necessary. An allowance will be made in the costing for a fire fighting system to be designed by Marsh.

The final design of the upgraded and integrated plant will be subjected to a comprehensive risk assessment process and full HAZOP review on all relevant Process Flow and Piping and Instrument Diagrams and full post commissioning follow-up assessment.

### **3. Process Description**

The current Klipfontein Tailings Dam will be depleted in mid-2015. The new re-mining activities at the Waterval East and West Tailings Dams will replace the Klipfontein Tailings Dam with feed material to the existing Western Limb Tails Re-treatment Concentrator. Lessons learnt from the Klipfontein Tailings Dam re-mining and pump station will be applied to the design and operating philosophy to the new Waterval East and West Tailings Dam re-mining and pump station.

The Western Limb Tails Re-treatment Concentrator will remain essentially as is, but with the addition of surge tanks and a Mainstream Inert Grind (MIG) circuit to improve plant recovery and concentrate grade; the addition of the MIG circuit is subject to final confirmation from pilot plant testwork.

#### **3.1 Re-mining and Pump Station**

##### **3.1.1 RE-MINING**

The design and operating philosophy of the Waterval East and West Tailings Dam re-mining and pump station is based on the lessons learnt from experience at the Klipfontein Tailings Dams.

Initially, a catchment pond next to the pump station will be cleared and developed. Adequate bund walls will be installed to protect the pump station and divert excess material from cloud bursts of rain to a storm water dam. A main earth launder (trench) will be established from the mining face to the catchment pond. Operations will begin by clearing vegetation and preparing a face prior to re-mining of a face. Tailings material will be “monitored” with high pressure jets from the work face into slurry and then gravitated to the catchment pond ahead of the pump station. The design of the HP water supply for the monitor guns will ensure a pressure of 30bar is achieved at the monitor guns.

A static grizzly will be installed in the main trench to remove large objects such as penstock poles. A hydraulic arm (or other suitable means) will be installed/utilized to clear any debris from the grizzly.

Due to the additional distance, and depending on the final mine design and mine plan, it is likely that a booster pump station will be required to transfer the slurry to the primary screening stage at the pump

station when the re-mining activities move to the WV East dam. The need for such a booster station could be negated by deploying vertical spindle pumps as part of the re-mining of WV East dam. It is accordingly excluded from the current project scope.

### 3.1.2 PRIMARY VIBRATING SCREENS AND TRANSFER SUMPS

The design and control philosophy of the pump station is based on the lessons learnt from experience at the Klipfontein Tailings Dams. The slurry will enter the pump station from the catchment pond through one suitably sized primary vibrating screen with 10mm apertures at the entrance to the pump station for the removal of tramp material, with provision made for an additional primary screen as a future option. Screen spray water will be provided. The oversize will fall from the screen onto a conveyor which will deposit the tramp material onto a stockpile for final disposal. The undersize will gravitate to the primary transfer sumps. **The large volume fluctuations and the large array of the type of debris will be properly considered during the design and sizing of the screens, conveyor, pumps, sump, and screen make-up water.**

In conventional re-mining activities cannot be quickly stopped and consequently the slurry continues to flow to the pump station for a considerable period after stopping re-mining activities. Therefore, any breakdowns or chokes of the primary vibrating screen, the primary transfer sump or the primary transfer pumps result in large spillages in the bunded area. Furthermore, repair work or un-choking is difficult while the sump is overflowing and the bund is full of spillage.

However, a new re-mining method is proposed by Fraser Alexander in which vertical spindle pumps are deployed to transfer the re-mined material to the pump station. The density fluctuations will still occur, but the flow will be much more controllable.

**Therefore, the primary screen, sump, and pumps (one duty and one standby) will be completely duplicated with a standby screen, sump, and pumps (one duty and one standby) in two separate bunded areas on the proposed layout plan, but the duplicates will not form part of the initial project. Each bunded area will have a spillage pump which can pump to either of the two primary vibrating screens.**

The design and operating philosophy of the primary transfer sump and pumps will ensure maximum running time of the pumps. The mechanical design will minimise pump trips from any process related interlock. Make-up water will be provided to each of the sumps to minimise pump trips to low level, and also provide a means to adjust the density during times of high slurry density from the re-mining operation. An automated recycle line will also be incorporated as a future installation option to recycle material from the primary transfer pumps back to the primary transfer sump during low-low level

conditions, thereby maintaining sump level and eliminating pump stoppages due to low sump level. The pumps will be all-metal pumps to ensure minimum breakdowns.

### **3.1.3 SECONDARY VIBRATING SCREENS**

The primary transfer sump will transfer the slurry to a distribution box above the secondary vibrating screen with 2mm apertures for the removal of further tramp material. The screen will be located on ground level on top of a dedicated transfer sump, instead of being placed on top of the surge tanks. This is to minimise structural vibrations and to facilitate easier access to the screens for inspection and maintenance. The vibrating screen, transfer sump, and pumps (one duty and one standby) will be duplicated in the layout, but the duplicates will be deferred as a future installation option.

Screen spray water will be provided from the clear water tank via dedicated spray water pumps. Tramp material will fall via a chute to a conveyor which deposits onto the tramp material stockpile next to the surge tanks from where it will be loaded by a front end loader onto a dumper truck for final disposal to a remote location. The screen undersize of the vibrating screen will gravitate to the transfer sump, from where it will be pumped to the surge tank.

### **3.1.4 SURGE TANKS**

Sufficient surge capacity will be installed to mitigate process fluctuations caused by remining.

### **3.1.5 WATER RECLAMATION**

Water will be reclaimed through cyclones, thickening and clarification.

### **3.1.6 FINAL TRANSFER SUMP AND PUMP TRAIN**

The slurry will be pumped from the remining station to WLTR at a suitable flow and density with a high pressure pump train.

### **3.1.7 INTERMEDIATE PUMP STATION**

The line between the pump station and the WLTR Plant is approximately 13.2 km long. The requirements for an intermediate pump station was investigated and confirmed during FEL2. The booster station will have a transfer sump with duty and standby pump trains.

### **3.1.8 WATER REQUIREMENTS**

All required water (clear and process) will be kept on site in tanks sized for 8 hours of residence time.

### **3.1.9 STORM WATER CONTROL**

The design of the storm water control (and spillage control) at the Waterval East and West Tailings Dams is to be confirmed as part of the design of the remaining site plan. Consideration must be given to incorporation of two dams (or other suitable infrastructure) to facilitate containment of flood waters and recovery of slurry and water back into the process in an efficient and safe manner. This combination will result in legal compliance for storm water control, easy reclamation of slurry from the concrete lined silt trap, and economical use of capital funds. Any excessive storm water from the catchment pond, excessive slurry from re-mining, and spillage from the pump station will be directed to the silt trap for initial containment of slurry and storm water, and can later be re-introduced to the primary vibrating screens in a controlled manner with a monitor gun washing the solids to the silt trap pump. Excessive water, for instance from a 1 in 100 year flood, will overflow the silt trap to the storm water dam. This, which will consist mostly of water, can later be re-introduced to the pump station in a controlled manner with the storm water dam pump.

All sumps and surge tank overflows at the pump station will report to the storm water dam via the silt trap.

### **3.1.10 AIR REQUIREMENTS**

A suitably sized compressor plant will be designed and installed to provide compressed air for instruments.

### **3.1.11 POWER REQUIREMENTS**

Power supply infrastructure will be designed and installed to supply the necessary power to drive the various items of equipment i.e. screens, pumps and agitators.

### **3.1.12 GSW REQUIREMENTS**

A suitably sized closed water tank will be installed at the pump station to supply of LP and HP gland service water (GSW) to the slurry pumps and overland pump trains. Dedicated GSW supply systems will be designed and installed to supply GSW to all the low pressure slurry transfer pumps and the final transfer pump trains by separate distribution systems.



## **3.2 Concentrator Plant**

### **3.2.1 PLANT FEED**

The plant feed from the Klipfontein pump station can currently be diverted to either the density control thickener, the mill feed surge tank, the mill discharge sump, or the final tail. All of these pipe routes and process options will be retained for the plant feed for the Waterval pump station. The incoming feed material will report directly to the primary mill surge tank.

Subject to final confirmation, as part of the detail design phase, the impact of the new particle size distribution from the Waterval East and West Tailings Dams on existing equipment and piping needs to be investigated with regard to the performance and suitability of the existing equipment and piping.

### **3.2.2 DENSITY CONTROL OF THE PLANT FEED**

Due to the increased distance from the Waterval East and West Tailings Dams, the existing density control thickener at the WLTR plant will become redundant because:

- the density control of the plant feed will be regulated at the pump station;
- the water will be reclaimed at the pump station to provide HP water for the monitor guns;
- and increased surge capacity will be provided at the pump station.

However, the pipe route to the density control thickener will be retained as a process option for treating Waterval Dam material.

### **3.2.3 LINEAR SCREEN AND PRIMARY MILL FEED SURGE**

The existing linear screen and primary mill feed surge tank will be retained. The surge tank currently provides 40 minutes of buffer capacity (at 100% volume). The plant feed from the pump station will be received into the new dilution surge tank from where it will be pumped at the required density to the existing linear screen (with 1mm aperture screen cloth) situated above the primary mill feed surge tank. The linear screen undersize stream gravitates to the existing primary mill feed surge tank. Tramp material removed by the linear screen falls to a vibrating dewatering screen where the tramp material is washed. The tramp material discharges from the dewatering screen into a small stockpile enclosure next to the surge tank from where it is loaded with a front end loader onto dumper trucks and removed to a remote location for final disposal. The undersize from the dewatering screen reports to the bund area spillage recovery system which returns the spillage back to the primary mill surge tank.

The mill feed surge tank pumps (one duty and one standby) currently transfer the material to the ball mill circuit. This option will be retained for normal operation. A new line will be installed for added flexibility to the IsaMill™ circuit to bypass the ball mill circuit.

Subject to final confirmation, and as part of the detail design phase, the impact of the new particle size distribution from the Waterval East and West Tailings Dams on existing equipment and piping needs to be investigated with regard to the performance and suitability of the existing equipment and piping. This includes a detailed assessment of the ability of the current linear screen to handle the increased throughput.

### **3.2.4 BALL MILL CIRCUIT**

The metallurgical requirement of the ball mill is currently to increase PGM liberation by producing a product of suitable fineness.

Main Stream Inert Grind (MIG) IsaMill™'s have shown that there is a metallurgical benefit to milling in an inert environment, even at the same grind as that of a ball mill. However, MIGs are susceptible to high operating costs when the feed is coarse. Therefore, with the addition of the MIG circuit, the metallurgical requirement of the ball mill will change to top size control.

Plant feed from the mill feed surge tank is currently fed to an automated de-slime cyclone nest, with a high solids split to the underflow and subsequently reporting to the ball mill. The de-slime cyclones will be modified or changed so as to produce a coarser cut point for top size control through the ball mill. A solids split of 30-40% to the underflow is envisaged, subject to further testwork. The option will be provided to either divert the de-slime feed or the de-slime cyclone overflow to the new MIG circuit.

The suitability of the current de-slime cyclone nest for the new application needs to be evaluated and verified as part of the design study. The de-slime cyclone overflow currently reports to the ball mill discharge sump. This pipe option will be retained. Full automation for cyclone selection in the cyclone nest is currently installed.

The ball mill discharges into the ball mill discharge sump. The discharge pumps (one duty and one standby) will transfer material via a new line to the IsaMill™ circuit for normal open circuit ball mill operation. The design duty of the existing ball mill discharge pumps will be confirmed for this revised duty to the MIG circuit from a volumetric and discharge head perspective. Currently, the mill discharge is pumped to the classification cyclones. This option will be retained for closed circuit operation. The classification cyclone overflow currently gravitates to the plant feed metal accounting sampler ahead of the rougher flotation bank. This option will be retained. Furthermore, an option to

send the classification cyclone overflow to the MIG circuit will be provided. Automated cyclone selection capability will be provided.

The capacity and integrity of any existing mechanical equipment, electrical installation and reticulation systems and the civil and structural construction that will be redeployed in the modified circuit, will be evaluated and verified as part of the design study.

### **3.2.5 MAINSTREAM INERT GRIND (MIG) CIRCUIT**

The overflow from the ball mill closed circuit cyclones will become the primary feed stock to the new MIG circuit.

During normal operation with the MIG circuit online, the overflow from the existing ball mill closed circuit cyclones will ,via a gravity flow launder, report to the MIG circuit. Currently, the overflow from the existing ball mill closed circuit cyclones gravitates, via the plant feed metal accounting sampler, to the rougher flotation bank. This facility will be retained for bypassing of the MIG circuit.

The following MIG circuit feed options will be incorporated into the plant design:

- Ball mill classification cyclone overflow (gravity flow if possible)
- Ball mill classification cyclone feed (pumped) – open circuit ball mill configuration
- Primary de-slime cyclone feed (pumped)
- Primary de-slime cyclone overflow (gravity flow if possible)

A fit for duty linear screen will be located on top of the MIG surge tank to remove any foreign material such as steel scats from the ball mill prior to entering the agitated surge tank directly beneath the linear screen.

The slurry will be pumped at a controlled rate from the MIG feed surge tank to a cluster of densifying cyclones ahead of the IsaMill™. The cyclone underflow will gravitate directly to the IsaMill™ feed sump where it will be pumped into the IsaMill™ unit. The overflow from the densifying cyclone will gravitate to a common IsaMill™ final product sump where it will be combined with the discharge from each of the four IsaMill™s. The final product sump and pumps (one duty and one standby) will transfer the combined IsaMill™ circuit product to the plant feed metal accounting sampler ahead of the rougher flotation bank.

A media hopper situated below the IsaMill™ will be installed. A jet pump system will transfer media to the IsaMill™ feed sump during operation. Media will be loaded to achieve and maintain an IsaMill™ power set point.

The short term emergency bypass facility will be provided that will allow the MIG densifying cyclone underflow to be diverted directly to the final product sump during periods when only the IsaMill™ has to be bypassed.

This MIG circuit will also be installed with the latest control philosophies.

An adequate media recovery system must also be provided.

### **3.2.6 METAL ACCOUNTING SAMPLER**

The rougher flotation feed will be sampled for metal accounting purposes prior to flotation. For the 500ktpm option it was proposed to install 3-off additional 130m<sup>3</sup> tank cells into the rough flotation circuit. Depending on how the new rougher cells are configured (either at the head or tail of the bank) it may be necessary to install a new metal accounting sampler ahead of the new rougher flotation cells if they are installed at the fee-end of the rougher flotation bank. Alternatively, if the new cells are installed at the tail end of the bank then it will be feasible to retain the existing Samstat™ sampler for metal accounting purposes of the rougher feed.

***These new cells have been deferred to save costs and will not form part of the current project.***

### **3.2.7 ROUGHER FLOTATION**

The existing rougher flotation circuit will be retained. The rougher bank consists of forced air tank cells.

The feed to the rougher flotation stage will be either form the ball mill circuit (ball mill classification cyclone overflow) or from the MIG circuit. Subject to final confirmation, as part of the detail design phase, the impact of the finer stream on the current rougher flotation section needs to be investigated with regard to the performance of the equipment.

### **3.2.8 ULTRA-FINE GRIND (UFG) CIRCUIT**

Subject to final confirmation, as part of the detail design phase, the impact of the finer stream on rougher mass pull and subsequent feed Ultra-Fine Grind (UFG) section needs to be investigated with regard to the performance of the equipment.

### **3.2.9 CLEANER FLOTATION CIRCUIT**

Subject to final confirmation, as part of the detail design phase, the impact of the finer stream on rougher mass pull and subsequent feed to the UFG and cleaner flotation section needs to be investigated with regard to the performance of the equipment.

### **3.2.10 CONCENTRATE HANDLING**

Subject to final confirmation, as part of the detail design phase, the impact of the finer concentrate on the current concentrate handling section needs to be investigated with regard to the performance of the equipment.

### **3.2.11 TAILINGS DISPOSAL**

Subject to final confirmation, as part of the detail design phase, the impact of the finer stream size distribution on the current tailings handling section needs to be investigated with regard to the performance of the equipment.

### **3.2.12 REAGENTS**

Subject to final confirmation, as part of the detail design phase, the requirement for additional reagent dosage points needs to be investigated with regard to the metallurgical performance of the plant.

### **3.2.13 SPILLAGE HANDLING**

The MIG circuit spillage must be contained in a sloped, banded concrete containment area. Floors are sloped towards a sump that will be protected by a 6mm stainless steel wedge wire screen.

The spillage sump will pump the spillage over a ceramic media recovery screen. The screen will have a dual aperture deck. The screen overflow will be discarded as waste. The slurry fraction will be pumped to the linear screen at the surge tank, while the recovered media will be reclaimed by a hopper with crane access.

### **3.2.14 POWER REQUIREMENTS**

Subject to final confirmation, as part of the detail design phase, the impact of the additional equipment on the overall power supply infrastructure needs to be reviewed and confirmed. Additional power will be required for the MIG circuit IsaMills™, pumps and agitators.

**3.2.15 AIR REQUIREMENTS**

Subject to final confirmation, as part of the detail design phase, the impact of the additional compressed air and instrument air requirements on the current compressed air section needs to be investigated with regard to the performance of the equipment.

**3.2.16 WATER REQUIREMENTS**

Subject to final confirmation, as part of the detail design phase, the impact of the additional potable & process water requirements on the current water reticulation system needs to be investigated with regard to the performance of the equipment.

The water balance will need to be investigated. A water line from WLTR Plant to the pump station may need to be provided.

**3.2.17 SAMPLING AND EVALUATION**

The Sampling and Evaluation systems and infrastructure shall be retained and is subject to final confirmation during the detailed design phase. All additional requirements shall conform to the current Western Limb Tailings Retreatment Plant and Anglo Platinum standards and procedures.

## **4. Process Control**

The design, development and implementation of the control solution, instrumentation and electrical drives will be in accordance to Anglo Platinum standards as defined in the relevant Control and Instrumentation Standard and Specification documents (AGS standards).

The pump station will be controlled at the pump station with its own PLC and SCADA, which will be fully visible from the WLTR Plant SCADA for additional monitoring, troubleshooting, and data logging purposes. The primary and final transfer sumps and pumps and the surge tank and pumps will be completely automated. Pump start-up, shut-down, and change-over sequences will be controlled automatically by the PLC. The primary transfer pumps and the surge tank pumps will be fitted with VSD's in order to deliver maximum flow stability and optimal utilisation if the installed buffer capacity. The final transfer pumps will be interlocked with high level of the delivery tank at the WLTR Plant.

In the design of the MIG installation, due cognisance must be given to the existing process control requirements and control objectives for the concentrator. Advanced control solutions will be implemented where proven benefits can be realised. The control solution shall make use of the Anglo Platinum control software standards and practices.

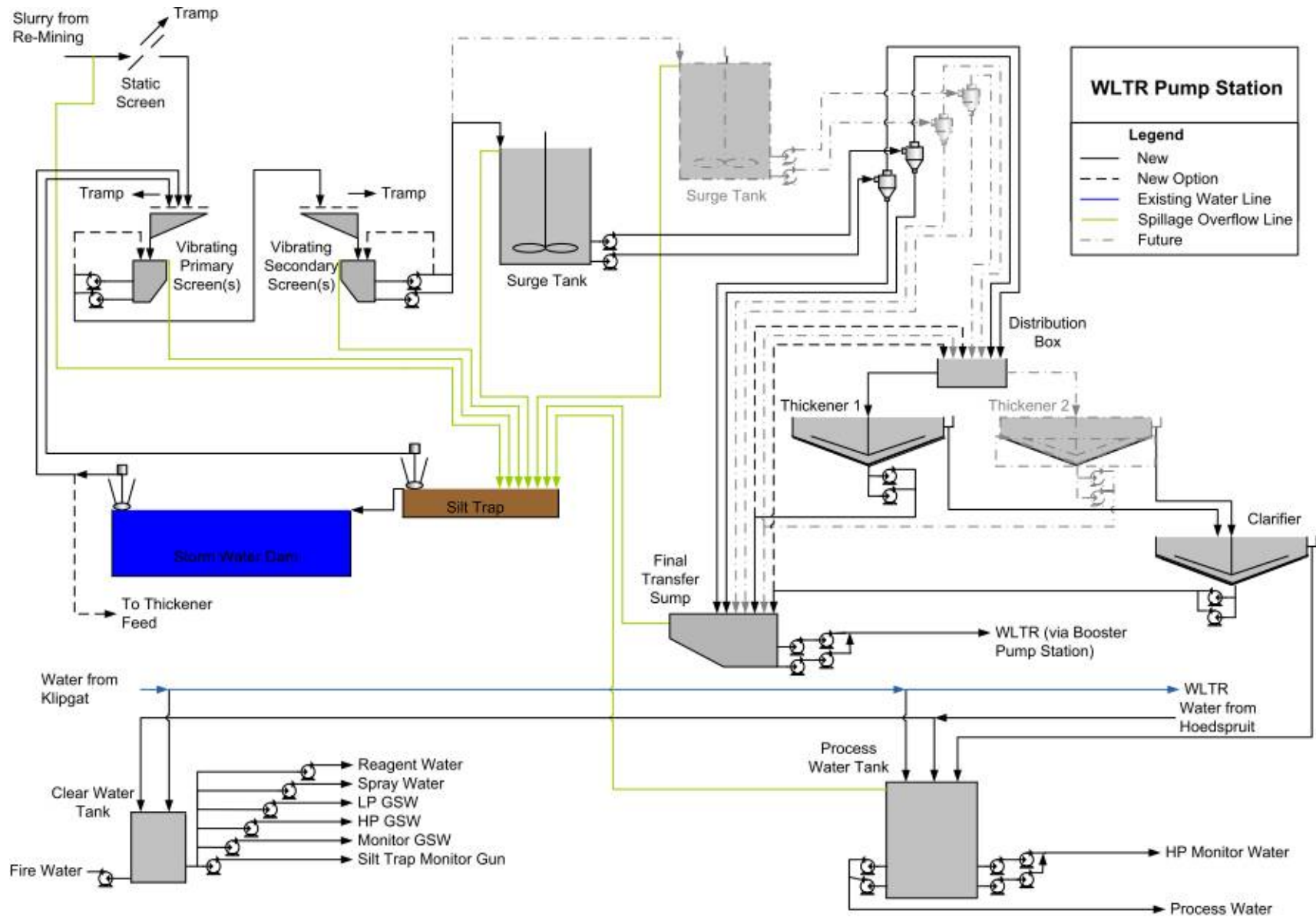
All instrumentation to be installed under the guidance of the relevant supplier and / or manufacturer who will be expected to guarantee the installation to a specified accuracy and precision and to Anglo Platinum standards.

Control and data logging for all new equipment and its associated instrumentation will be exercised via the upgraded and expanded networked PLC/SCADA.

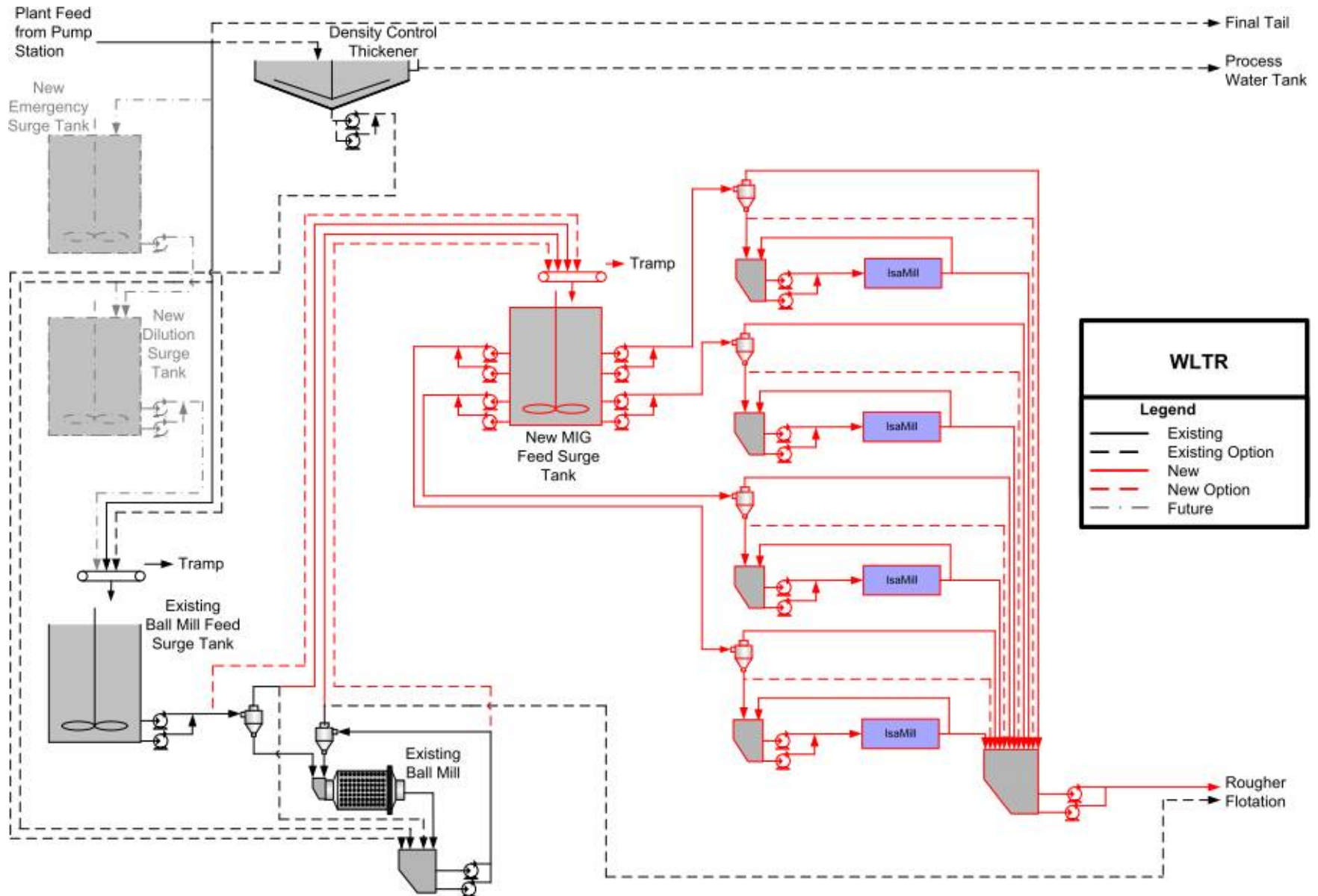
Normal MIG plant start-up & shutdown will be by sequence control via the PLC. Media addition will be automatically controlled by the PLC.

## **5. Appendices**



**5.1 Process Flow – Re-Mining and Pump Station**


## 5.2 Process Flow – WLTR Plant



# Appendix 4: Public Participation – Scoping Phase

4.1 Stakeholder Database

4.2 Site Notices

4.3 Background Information Document

4.4 Newspaper Adverts

4.5 Letters of Notification of EIA Process, Public / Focus Group meeting and Scoping Report for review

4.6 Issues Trail

## 4.1 Stakeholder Database

Name	Surname	Company	Designation
Mr Martin	Malatsi	African National Congress (ANC)	Representative
Ms Johanna Matyila	Matyila	ANC Youth Organisation	
Alwyn Botha	Botha	Anglo Platinum	-
Mr André Britz	Britz	Anglo Platinum	Chief Environmental Co-ordinator
Sarel de Jager	de Jager	Anglo Platinum	Senior Metallurgist
Nishi Haripoursad	Haripoursad	Anglo Platinum	Environmental Manager Process
Pierre Malan	Malan	Anglo Platinum	Project Manager
Mumsv Malebadi	Malebadi	Anglo Platinum	Environmental Coordinator Waterval Smelter
Moseli Motselobane	Motselobane	Anglo Platinum	Civil Engineer
Ms Thabisile Phumo	Phumo	Anglo Platinum	Corporate Communication
Libby Redding	Redding	Anglo Platinum	Social Advisor
Pule Soaisa	Soaisa	Anglo Platinum	Environmental Coordinator PMR
Andre Spanenberg	Spanenberg	Anglo Platinum	Engineering Manager
Dudu Ratshefola	Ratshefola	Anglo Platinum	Socio-Economic Development
Vinesh Ditsook	Ditsook	Anglo Platinum Limited	Environmental Manager: Mining, Joint Ventures and Water Management
Claudina Noqueira	Noqueira	Anglo Platinum Limited	Senior Health and Safety Advisor
Mr Ishmael Sekano	Sekano	Anglo Platinum, Rustenburg Section	Socio-Economic Development
Mr Gordon Ramsav	Ramsav	Aquarius Platinum	Project Director
Mr Johan de Bruyn	de Bruyn	Arnoldstad Ontwikkelings Trust	Member
Mr Louis Viljoen	Viljoen	Arnoldstad Ontwikkelings Trust	Self Employed
Irene van Zyl	van Zyl	Arnoldstad Ontw. Trust -	Secretary
Ms Louise Smith	Smith	Ass. Country Women of the World	Activist
Mr Euaene Huma	Huma	Bafokeng Bleskop Business Forum	Shift supervisor
Mr Bernard Modiba	Modiba	Bafokeng Bleskop Business Forum	Member
Mogomotsi Molefe	Molefe	Bafokeng Bleskop Business Forum	Member
Mr Lawrence Mooqi	Mooqi	Bafokeng Bleskop Business Forum	Member
Councillor Thabo Makgale	Makgale	Bafokeng Community: Land Affairs Department	Councillor
Joas B Petlele	Petlele	Bafokeng Policing Forum	Chairperson
Mr George Khunou	Khunou	Bafokeng Sports	Managing Director
Mr Peter Lekalakala	Lekalakala	Boitekong Community	Member
Mr David Lesejane	Lesejane	Boitekong Community	Member
Mr Kaizer Letsholo	Letsholo	Boitekong Community	Member
Ms Agnes Mathule	Mathule	Boitekong Community	
Mr Gideon Menoe	Menoe	Boitekong Community	CPF Chairperson
Mr Michael Moalosi	Moalosi	Boitekong Community	Community Member
Mr Luckv Mocomotsi	Mocomotsi	Boitekong Community	Councillor
Ms Lisbeth Molefe	Molefe	Boitekong Community	Community Member
Ms Nono Mosimane	Mosimane	Boitekong Community	Community Member
Mrs Maria Ndlovu	Ndlovu	Boitekong Community	Community Member
Mr Goitsemanq Phiri	Phiri	Boitekong Community	
Mr Stephen Sedikwe	Sedikwe	Boitekong Community	Community Member
Ms Innocentia Senna	Senna	Boitekong Community	Community Member
Mrs Maria Simanqo	Simanqo	Boitekong Community	
Mr Paris Teme	Teme	Boitekong Community	Community Member
Ms Dineo Boutlwanvi	Boutlwanvi	Boitekong Community Library	Librarian
Mr Poiso Bothomane	Bothomane	Boitekong Development Forum	Secretary
Mr David Coetsee	Coetsee	Boitekong Unemployment Forum	Chairperson
Mr Prince Morare	Morare	Bonjanala Platinum District Municipality	Environmental Manager
Mr Hopewell Radebe	Radebe	Business Dav	News Editor
Mr Shadrack Gwebu	Gwebu	Community Development Committee	RDP Chairman
Mr Joyleaf Roase	Roase	COSATU	Face street flagger
Mr Jan Marais	Marais	DEA	Chief Air Pollution Control Officer and Clean Air
Mrs RA Dikolomela	Dikolomela	Department of Agriculture	Agriculturalist
Ms RM Monnagotla	Monnagotla	Department of Agriculture	-
Mrs CN Raseapei	Raseapei	Department Of Education	AET Specialist
Mr JA Sithole	Sithole	Department Of Education	Learning Area Coordinator
Mr Thomas Baloyi	Baloyi	Department of Health	Environmental Health Practitioner
Mr Phumudzo Nethwadzi	Nethwadzi	Department of Minerals and Resources	Assistant Director
Mr Richard -	-	DEPARTMENT OF RURAL DEVELOPMENT & LAND REFORM	-
Ms KS Seboka	Seboka	Department of Social Services	Social Work Supervisor
Ms Sebenzile Ntshangase	Ntshangase	DWA	Water Pollution Control Officer
Mrs Caroline Shai	Shai	DWA	Assistant Director
Mr Jacobus Malan	Malan	Ecoserv	Gauteng Regional Manager
Damaria Matshaba	Matshaba	Environmental Justice Networking Forum (EJNF)	Adminstrator
Mr Sandy Nkoothwe	Nkoothwe	Environmental Justice Networking Forum (EJNF)	Administrator
Lungile Motsisi	Motsisi	Eskom	-
Ms Queen Quando	Quando	Federated Mining and Allied Industries	General Secretary
George Khunou	Khunou	Fike trust	Managing Director
Mr A P Senne	Senne	Fike Trust, Photsanena Village	Member
Conrad Cross	Cross	Fraser Alexander	Programme Manager
Matthew Gordon-Watt	Gordon-Watt	Fraser Alexander	Project Manager
Nicolai Massyn	Massyn	Green Gain Consulting	Consultant
Ipeleg Tsoanamatsie	Tsoanamatsie	Green Gain Consulting	Assistant Research and Development
Dr Julius Pistorius	Pistorius	Heritage	Archaeologist
FC Graham	Graham	Impala Platinum	
Mrs Suan Mulder	Mulder	Impala Platinum	Environmental Manager
Mr Morris Nte	Nte	Impala Platinum	Community Liaison Officer
Jeannine Njenaber	Njenaber	J9 Consulting	-
Mr Alan Forrester	Forrester	Kelgran (Pty) Ltd	Kelgran (Pty) Ltd
Kgosana Jacob Petlele	Petlele	Kgosana, Madiba Mantsho, Thekwana Community	Community Member
Ms Brenda Moja	Moja	Kopano Care Centre for People with Disabilities	
Mr Robin Wardle	Wardle	Kopano Joint Venture	Engineering Manager
Ms Erika Wenhold	Wenhold	Kroondal and Ward 31 Environmental Forum	Member
Mr Manfred Suhr	Suhr	Kroondal Environmental Forum	Spokesperson: Environmental Matters
Mr B Tlou	Tlou	Lefaraqathe	Monnagotla
Ms Durkie Gilfillan	Gilfillan	Lrc	Attorney Regional Director
Ms Rachel Banda	Banda	Mafdikwe Community	Community member
Mr Roelf le Roux	le Roux	Magalies Water Board	Member

Mr Sean	Lindsay	Magalies Water Board	Member
Mr Herman	Mothibedi	Mahube Trust	Facilitator
Mr Willie	Sebola	Mahube Trust	Marketing Director
Lizette	Barnard	Man-Dirk	Internal sales
Andia	Pienaar	Man-Dirk	Environmental Scientist
Mr Andrew	Mogander	Member	Youth Sunrise Ext 9
Menge	Madumc	Menge Communications	Director
B	Soulee	Mfidikwe	
J.	Mokgethwa	Mfidikwe	
Mogomotsi	Rakoma	Mfidikwe	
Ms Elizabeth	Mpane	Mfidikwe Community	Community Member
Ms Refilwe	Phakwe	Mfidikwe Community	Community Member
Ms Elizabeth	Rakomo	Mfidikwe Community	Community Member
Mr Harv	Seoane	Mfidikwe M.C.D.C	Member
Dr A	Conradie	Modderfontein Irrigation Board	Secretary
Mr Elifas	Ngoepe	National Union of Mineworkers	Rustenburg Region
Adv Abrie	van der Nest	Neels van der Nest Beleggings BK	Advocate
Mr Neels	van der Nest	Neels van der Nest Beleggings BK	Managing Director
Johannes	Huma	North East Regional Councilor Bafokeng	Councilor
Livhuwani	Kutame	North West Department of Agriculture, Conservation & Environment	Environmental Officer
Mr Marchand	le Roux	North West Department of Agriculture, Conservation & Environment	Compliance
Mr Seoka	Lekota	North West Department of Agriculture, Conservation & Environment	Environmental Officer
Mrs Delta	Mahlaku	North West Department of Agriculture, Conservation & Environment	Environmental Officer
Mr Percy	Matlapeng	North West Department of Agriculture, Conservation & Environment	Deputy Director: Air Quality
Ms Motshabi	Mohlalsi	North West Department of Agriculture, Conservation & Environment	Administrator
Mr Steven	Mukhola	North West Department of Agriculture, Conservation & Environment	Assistant Director
Ouma	Skosana	North West Department of Agriculture, Conservation & Environment	
Chris	de Bruyn	North West Ecoforum	Director
Mr Godfrey	Lethuping	North West Ecoforum	Member
J	Vanwyk	North West Provincial Government	-
Robert	Nermanashi	NWDETECT	Case Officer (Primary contact)
Ms Daphney	Mmitsinyane	Paardekraal Ward 22	Community Member
Irene	Mokoka	Paardekraal/Boitekong Community	Paardekraal Ward 19
Ms Welheminah	Radebe	Paardekraal/Boitekong Community	Community Member
Mrs Louisa/ Mr Petrus	Soko	Paardekraal/Boitekong Community	Community Members
Mr Ben	Huma	Phothemfi	Community Developer
Mrs Jeanette	Molefe	Phothemfi Community	Education
Mr Frank	Diale	Phothemfi Community Development	Member
Mr Tidimalo	Molefe	Phothemfi Community Development	Chairperson
Mr Hashiev	Setshedi	Phothemfi Youth League (Buvo)	Member
Mr George	Khunou	Photsane ng Community	Member
Mr Martin	Khunou	Photsane ng Community	Environmental Issues
Mr Cecil	Molotsane	Photsane ng Community	Community Member
Mr Abednigo	Senne	Photsane ng Community	Community Member
Mr Bashimane	Senne	Photsane ng Community	Community Member
Ms Grace	Khunou	Photsane ng Community Development	Member
Kgosi Maboti	Molotsane	Photsane ng Community, Lekoie	
Paula	Khomo	Photsane ng Consultative Forum	Member
Mr Patrick	Khunou	Photsane ng Consultative Forum	Member
Ms Laura	Modimokwane	Photsane ng Consultative Forum	Member
Ms Doris	Modimokwane	Photsane ng Consultative Forum	Member
Mr Boikanvo	Molotsane	Photsane ng Consultative Forum	
Mr Solomon	Ramoale	Photsane ng Consultative Forum	
Mr Louis	Rathubane	Photsane ng Consultative Forum	Member
Mr Fred	Setshoane	Photsane ng Consultative Forum	Member
Mr John	Critchlev	Rand Water	Chief Planning Engineer
Ms Rosina	Maboe	Regional Youth with Purpose	
Itumeleng	Huma	Royal Bafokeng Administration	Land Affairs
Ernie	Kemm	Royal Bafokeng Administration	Spatial Planner
Mr Pat	King	Royal Bafokeng Administration	Land Administrator
Pleasure	Mabyane	Royal Bafokeng Administration	Land Affairs Officer
Mr Karabo	Peele	Royal Bafokeng Administration	Chairman: Mining Commission
Reotshobile	Tlhapane	Royal Bafokeng Administration	Environmental
Teresa	Talaard	Royal Bafokeng Holdings	Investment Manager
Ms Reotshobile	Tlhapane	Royal Bafokeng Holdings	Environmental Manager
Mr N	Khunou	Royal Bafokeng Nation	Kgosana
Mr	Mokgethi	Royal Bafokeng Nation	Monnakgotla
Mr D	Mpiti	Royal Bafokeng Nation	Monnakgotla
Mr JV	Petlele	Royal Bafokeng Nation	Kgosana
Mr Molope	Petlele	Royal Bafokeng Nation	Headman
Mr Bruno	Seabela	Royal Bafokeng Nation	Corporate Governance Executive
Mr B	Setuke	Royal Bafokeng Nation	Kgosana
Adv Modisaotsile	Mokate	Royal Bafokeng Nation/ Administration	Advocate
Mr Khalid	Patel	Representing Royal Bafokeng Administration	EIMS Consultant
Ms Charmaine	van Heerden	Rustenburg Civic Centre	
Ms Francinah	Maema	Rustenburg Community Development Centre	Project Manager
Mr Waldie	Volschenk	Rustenburg Herald	Reporter
Mr R C	du Preez	Rustenburg Local Municipality	Electricity
Mr N	Grootboom-Mashile	Rustenburg Local Municipality	Manager: Satellite offices
Mrs	Kelobogile	Rustenburg Local Municipality	EIA
Ms NH	Kubheka	Rustenburg Local Municipality	Ward Committee
Mr Tshupo	Lena ke	Rustenburg Local Municipality	Integrated Environmental Management
Mr T D	Lehooole	Rustenburg Local Municipality	Civil Facilities

Mrs JM	Lesejane	Rustenburg Local Municipality	Ward Committee Member
Mr Ja cob	Litsine	Rustenburg Local Municipality	
Mrs MA	Mabalane	Rustenburg Local Municipality	Coordinator Mining & Industrial
DR	Maeko	Rustenburg Local Municipality	Municipal Manager
Ms DMM	Matlapeng	Rustenburg Local Municipality	Development Practitioner
Kelebogile	Mekgoe	Rustenburg Local Municipality	Environmental impact assessment co-ordinator
Ms AB	Moale	Rustenburg Local Municipality	Ward Committee
Mr L K	Mokotedi	Rustenburg Local Municipality	Community Development
Mr Levv	Mokwele	Rustenburg Local Municipality	Community Development
Mrs Gloria	Moopelwa	Rustenburg Local Municipality	IDP Specialist
Ms CP	Motlhaloga	Rustenburg Local Municipality	Ward Committee
Mr Moses	Phakoe	Rustenburg Local Municipality	
Mr Jan	Pieters	Rustenburg Local Municipality	Planning
Mr Marc	Rapoo	Rustenburg Local Municipality	Director
Paul	Sebegoe	Rustenburg Local Municipality	Director of Planning and Human Settlement (DP&HS)
Mrs MM	Selope	Rustenburg Local Municipality	Ward Committee Member
Mr AL	Seome	Rustenburg Local Municipality	IGR Coordinator
Mr BB	Setshedi	Rustenburg Local Municipality	Ward Committee
Mr R	Thekiso	Rustenburg Local Municipality	Water and Sanitation Section
Ms L	Tumane	Rustenburg Local Municipality	IDP Officer
Mr Matthews	Wolmarans	Rustenburg Local Municipality	Mayor
-	Khunou	Rustenburg Local Municipality	Ward Councillor
Ms Andy	Mannathoko	Rustenburg Local Municipality	Mine Coordinator
Mrs Kathleen	Matshidiso	Rustenburg Local Municipality	Local Economic Development
-	Mothamme	Rustenburg Local Municipality	Ward Councillor
-	Ntshole	Rustenburg Local Municipality	Ward Councillor
Councillor Sheila	Mabale-Huma	Rustenburg Municipality	
Mr Pieter	Louw	Rustenburg Public Library	Librarian
Mr T J	Suze	Rustenburg Public Library	Librarian
Andrew	Saloman	SAHRA	
Mr Lucky	Sithole	SANCO	
Ms Lydia	Kalayamotho	Sikhathi Basadi Cooperative	Member
Ms Malmsey	Zitha	Socio-Economic Development: Northwest Province	Manager
Ms Keitumetse	Mokgophe	South African Heritage Resource Agency	Provincial Manager: North West
Francois	Joubert	Tabacks	Director
Mr Daniel	Motswad	Teb83 Moves Transport CC	Transporter
Mr IB	Ngobeze	TEBA	Regional Coordinator
Mr IM	Ntshingila	TEBA	Consultant - TEBA
Mr Mique	Dos Santos	Tenova Pyromet	Project Manager
Mr Roney	Monageng	Thekwane Community	Deputy Headman Madibana
Ms Marv	Mphecele	Thekwane Community	Community Member
Mr Joshua	Nape	Thekwane Community	Community Member
Mr Thabo	Khutsoane	Tlhabane Community	Member
Mr McDonald	Nkangalani	Townlands	
Mr Lawrence	Pebe	Townlands	
Vinceni	Mtshane	Transnet	-
David	Koophane	Transporter	Koophs Projects
Ms Joyce	Sedumedi	Tshepanano Basadi Cooperative	Member
Mr Mothanke	Tladi	Tsogo Distribution and Construction	
Jaco	Geldenhuys	TWP	Engineering Manager
Alex	Kinmont	TWP	Project Manager
Mr Lazarus	Mfulwane	Unemployed	N/A
Mr Frederick	Slabbert	UWP Consulting	Consultant
Mr Charles	Sanbow	Wesizwe Platinum	Chief Operating Officer
Mr Oresi	Nbeduwa	Wisco	CEO
Catherine	Greengrass	WSP	Senior Environmental Consultant
Jared	O'Brien	WSP	Assistant Environmental Consultant
Mr Guv	Longoomo	Xstrata Alloys	Environmental Coordinator
Mr Deon	Pistorius	Xstrata Alloys	Environmental Coordinator
Mr Neels	Cornelius	Xstrata South Africa (Pty) Ltd	Secretary
Mr George	King	Xstrata South Africa (Pty) Ltd	
Mr GA	Nape	Xstrata: Madibana Community Development Committee	Community Secretary
Mr Herbert	Modupi	Yamedupi	Public Participant Practitioner
Enoch	Ramoete	Youth Sunrise Ext 9	
Mr	Modise	Mfidike Primary School	-
Mr	Molefe	Thekwane Thage Primary School	
Ratau	Seabelo	Anglo Platinum	Metallurgical Engineer
Piet	Botha	Anglo Platinum	UG2 Concentrator
Anaelic	Gous	Anglo Platinum	UG2 Concentrator Administrator
Micheal	-	Anglo Platinum	Fraser Alexander

## 4.2 Site Notices



# ENVIRONMENTAL AUTHORISATION



Notice of environmental authorisation process, environmental management programme amendment and a water use license amendment in accordance with the National Environmental Management Act (No. 107 of 1998) as amended (NEMA), the Minerals and Petroleum Resources Development Act (No. 28 of 2002) (MPRDA), and the National Water Act (No. 36 of 1998) (NWA).

**Proponent:**

**Anglo American Platinum Limited:  
Rustenburg Platinum Mines Limited**

**Project Location:**

**Waterval Tailings  
±4km's East of Rustenburg**

**Project Start Point:**

**25°39'23.12"S 27°18'21.34"E**

**Project End Point:**

**25°41'09.92"S 27°23'48.98"E**

**Independent Environmental  
Assessment Practitioner:**

**WSP Environment and Energy**

## Environmental Authorisation Processes for the proposed Re-mining of Anglo American Platinum Waterval Tailings Storage Facilities located in Rustenburg, North West Province.

Rustenburg Platinum Mines (RPM) located in Rustenburg in the North West Province propose to re-mine the Waterval Tailings Storage Facilities for reprocessing at the Western Limb Tailings Retreatment (WLTR) Facility. The project includes the proposed construction of a pipeline, a pump station, a pre-treatment plant with a pumpstation, a booster station, a pollution control dam, an increase in the height of the Hoedspruit Tailings Storage Facility and the installation of IsaMills™ within Mainstream Inert Grinding (MIG) applications within the existing WLTR. The re-mined material will be piped to and processed at the existing WLTR Plant. The construction and the operational phases of the project are expected to commence in Q4 of 2013 and Q1 of 2015, respectively.

The project involves activities listed in terms of the National Environmental Management Act (NEMA) (No. 107 of 1998), water uses listed in the National Water Act (No. 38 of 1998) (NWA) and requirements of the Mineral and Petroleum Resource Development Act (No. 28 of 2002) (MPRDA). In accordance with NEMA, the undertaking of certain listed activities requires environmental authorisation. The listed activities associated with the Re-mining project are as follows: Activity 9, 10, 11, 18, 22, 23 and 47. Additionally, Activity 6 of Government Notice Regulation 545 was identified which requires a Scoping and Environmental Impact Assessment (EIA) Process to be undertaken. An application for environmental authorisation was submitted to the North West Department of Economic Development, Environment, Conservation and Tourism (NWDEDECT) on 21 August 2012.

In addition, water uses 21 (c), (i) and (g), listed under Section 21 of the NWA are relevant and will require authorisation from the Department of Water Affairs (DWA) in the form of an amendment to the existing Integrated Water Use License.

Furthermore, as the proposed project is located in a mine lease area, RPM is required to undertake an Environmental Management Programme Report (EMPR) Amendment process according to the MPRDA.

In order to ensure that you are registered as a Stakeholder or would like to participate and find out more about the project, please submit your

name, contact information and interest in the matter to Jared O'Brien.

**WHAT IS STAKEHOLDER ENGAGEMENT?**

A process in which potential stakeholders are informed about the project and given an opportunity to comment on, or raise issues relevant to the proposed activities.

**WHO ARE STAKEHOLDERS?**

Any person, group of persons or organisation interested in and / or affected by an activity; and any organ of state that may have jurisdiction over any aspect of the activity.

**SCOPING REPORT**

The Scoping Report will be made available for public review at the following venues from 29 November 2012 – 27 January 2013:

- Thekwane Tlhage Primary School;
- Mfidike Primary School;
- Fraser Alexander Offices at Waterval TSFs;
- Tlhabane Public Library;
- Rustenburg Local Municipality;
- Western Limb Tailings Retreatment Facility.

**PUBLIC MEETINGS**

The Public Meeting will be held at the Tshukudu High School on Wednesday the 16th of January 2013 from 16:00pm to 17:30pm.

Should you wish to attend one of the Public Meetings, please respond to Jared O'Brien by 07 January 2013.

**FOR MORE INFORMATION, OR TO REGISTER AS AN INTERESTED OR AFFECTED PARTY, CONTACT:**

**Jared O'Brien  
WSP Environment and Energy**

**T** 011 361 1396  
**F** 086 505 3939  
**E** Jared.O'Brien@WSPgroup.co.za

PO Box 5384, Rivonia, 2128

# THEBOLO YA TIKOLOGO



Notice Kitsiso ya tsamaiso ya thebolo ya tikologo, phetolo ya pegelo ya lenaneo la taolo ya tikologo le phetolo ya laesense ya tiriso ya metsi go ya ka Molaotlomo wa Naga wa Taolo ya Tikologo (No. 107 wa 1998) o tlhabolotswe (NEMA), Molaotlomo wa Tlhabololo ya Ditlamelwa tsa Diminerale le Peteroliamo (No. 28 wa 2002) (MPRDA), le Molaotlomo wa Metsi wa naga (No. 36 wa 1998) (NWA).

#### **Motlhagisi:**

**Anglo American Platinum Limited:  
Rustenburg Platinum Mines Limited.**

#### **Project Location:**

**Waterval Tailings  
±4km's East of Rustenburg**

**Ntlhatshimololo ya Porojeke:  
25°39'23.12"S 27°18'21.34"E**

**Ntlhapholetso ya Porojeke:  
25°41'09.92"S 27°23'48.98"E**

**Modiredi yo o ikemetseng wa  
Tlhatlhobo ya tsa Tikologo:  
WSP Tikologo le Maatla**

## Tsamaiso ya Thebolo ya Tikologo malebana le Tshikhinyo ya go epa gape Ditlamelwapolokelo tsa Masaedi tsa Anglo American Platinum, Waterval tse di leng kwa Rustenburg mo Porofenseng ya Bokonebophirima.

Ditirelo tsa moepo tsa Rustenburg Platinum Mines (RPM) tse di kwa Rustenburg mo Porofenseng ya Bokonebophirima, e tshikhinyo go epa gape Ditlamelwapolokelo tsa Masaedi tsa Waterval ka maikaelelo a go di tswetsa kwa Madirelong a Western Limb Tailings Retreatment (WLTR). Porojeke e akaretsa tshikhinyo ya go aga metato ya dipeipi, seteišene sa pompo, polante ya paakanyetso, seteišenetsosoloso, tamotshoganyetso ya bodutiso jwa diela, tamo ya taolo ya kgotlelego, kgodiso ya bogodimo jwa Ditlamelwapolokelo tsa Masaedi tsa Hoedspruit, le tlhomo ya IsaMills™ mo ditirong tsa Kelelokolong e e Emeng ya Tshilo (MIG) mo go WLTR e e leng teng. Dilwana tse di tla epiwang gape di tla ntshiwa ka dipeipi mme tsa tswetswa kwa polanteng e e teng ya WLTR. Go solofetswe gore tiro ya go aga e fitlhe pheletsong ka 2014 e be porojeke e simolola ka 2015.

Porojeke e akaretsa ditiro tse di neetsweng go ya ka Molaotlomo wa Naga wa Taolo ya Tikologo (NEMA) (No. 107 wa 1998), tiriso ya metsi e e neetsweng mo go Molaotlomo wa Naga wa Metsi (No. 38 wa 1998) (NWA), le ditlhokego tsa Molaotlomo wa Tlhabololo ya Ditlamelwa tsa Diminerale le Peteroliamo (No. 28 wa 2002) (MPRDA). Go ya ka NEMA, tiragatso ya ditiro dingwe tse di naneofaditsweng e tlhoka thebolo ya tsa tikologo. Ditiro tse di kwadilweng tse di tsamaelanang le porojeke ya go epiwa gape ke tse di latelang: Tiro 9, 10, 11, 18, 22, 23 le 47. Go feta fa, Tiro 6 ya Kitsiso ya Molawana wa Puso wa 545 e lemogilwe, e e tlhokang Tsamaiso ya Tlhatlhobo ya Boalo jwa Seabe go Tikologo (EIA). Go tsentswe kopo ya thebolo ya tikologo go Lefapha la Tlhabololo ya Ikonomi, Tikologo, Tsholo le Bojanala la Porofense ya Bokonebophirima, (NWDEDECT) ka la 21 August 2012.

Go tlaleletsa fa, tiriso ya metsi ya 21 (b), (c) le (i), tse di kwadilweng mo go Karolo 21 ya NWA, e ka nna maleba mme e ka tlhoka thebolo go tswa go Lefapha la tsa Metsi (DWA) ka tsela ya laesense ya tiriso ya metsi e ntšhwa kgotsa e e tlhabolotsweng, kgotsa thebolokakaretso.

Go tlaleletsa fa, ka gobo porojeke e e tshikhinngwang e le mo karolokhirong ya moepo, RPM e tlhoka go dira tsamaiso ya Paakanyo ya Pegelo ya Lenaneo la Taolo (EMPR) go ya ka MPRDA.

Go netefatsa gore o ikwadisitse jaaka Mong, kgotsa go bona tse dingwe malebana le porojeke, tsweetswee neela leina la gago,

tshedimosetsokgokagano mmogo le kgatlhego mo kganyne e, ka Letlha le le neetsweng, go Jared O'Brien.

#### **BOTSAAKAROLO JWA MONG KE BOFE?**

Tsamaiso e mo go yona beng ba ba akanyetswang ba itsisiweng ka ga porojeke le go neelwa tšhono ya go tshwaela kgotsa go neela dintlha malebana le ditiro tse di tshikhinngwang.

#### **BENG KE BOMANG?**

Mongwe fela, setlhopho sa batho kgotsa setlamo se se nang le kgatlhego go, e bile/kgotsa se amiwa ke tiro; sere sa puso se se nang le tise semolao mo karolong nngwe ya tiro e.

#### **PEGelo YA BONAMO**

Pegelo ya Bonamo e tlaa neelwa morafe go thadisiwa kwa mafelong a a latelang: 29 November 2012 – 27 January 2013:

- Sekolopotlana sa Thekwane Tlhage;
- Sekolopotlana sa Mfidike;
- Fraser Alexander Dikantoro kwa Waterval TSFs;
- Tlhabane Librarya ya botlhe;
- Rustenburg Masepala wa selegae;
- Ditabakelo tsa Bophiriwa Limb Tailings Retreatment Facility.

#### **DIPITSO TSA BOTLHE**

- Sekolo se segole sa Tshukudu (16/01/2013, 16:00pm - 17:30pm)

Fa o tlhoka kaelotsela go ya go lengwe la mafelo a, tsweetswee romela kopo go Jared O'Brien (07 January 2013).

#### **GO BONA TSHEDIMOSETSO E NNGWE, KGOTSA GO IKWADISA JAAKA MOTHO YO O NANG LE KGATLHEGO KGOTSA YO O AMEGANG, GOKAGANA LE:**

**Jared O'Brien  
WSP Tikologo le Maatla**

**T** 011 361 1396  
**F** 086 505 3939  
**E** Jared.O'Brien@WSPgroup.co.za

PO Box 5384, Rivonia, 2128

## 4.3 Background Information Document

# Environmental Authorisation Processes for the proposed Re-processing of Anglo American Platinum Waterval Tailings Storage Facilities located in Rustenburg, North West Province

## Detailed Project Description

Anglo American Platinum Limited: Rustenburg Platinum Mines (RPM) mining operations are located in Rustenburg, in the North West Province. The Waterval Tailings Storage Facilities (TSFs), which are positioned in the RPM lease area, are located 4 km east of Rustenburg, 1.5 km west of Bokamoso, 3.5 km north of Waterkloof and 3.5 km south of Boitekong. The Waterval TSFs (East and West facilities) were previously used to deposit tailings material from mineral processing operations. Following tests conducted on the Waterval tailings, latent reserves have been identified that warrant the re-processing of the tailings. The re-processing of the Waterval TSFs was authorised by the Department of Minerals and Energy (now the Department of Mineral Resources) as part of an amendment to the existing Environmental Management Programme (EMPR) in 2002. Although authorised, the re-processing of the Waterval tailings has not yet commenced. Recent changes to proposed infrastructure and the layout of the project require the EMPR to be amended again. Additionally, some of the changes involve activities for which environmental authorisation from the North West Provincial Department of Economic Development, Environment, Conservation and Tourism (NWDEDECT) will be required.

The re-processing involves the use of hydraulic hoses, which sluice the face of the tailings. The resulting slurry collects in a sump via a system of drains or launders and into a collection sump. The West TSF will be processed in three benches, namely an upper, middle and lower bench, each 14 m, 12 m and 12 m in height respectively. The East TSF will be processed in two benches, an upper and lower bench, each being 12 m in height. The slurry will then be pumped (via a proposed pump station) through a proposed pipeline to the Western Limb Tailings Retreatment (WLTR) Plant. The project thus includes the proposed construction of a pipeline, a pre-treatment plant with a pump station, a booster station, a Pollution Control Dam and the installation of IsaMills™ within Mainstream Inert Grinding (MIG) applications.

A pre-treatment plant will be incorporated into the pump station, including a receiving facility, screening, surge tanks and thickeners, which are proposed to pre-treat the slurry before piping it to the WLTR Plant. The pre-treatment plant will also be used for water recovery prior to piping the slurry to the WLTR plant.

At the WLTR plant, the minerals contained in the tailings material will be extracted from the slurry. The WLTR Plant was initially constructed to re-treat tailings material from the Klipfontein TSF, which is located 6 km south east of the Waterval TSFs. The re-processing of the Klipfontein TSF is expected to reach completion in 2014, at which point the re-processing of the Waterval TSFs will be initiated.

The process, design and layout changes to the re-processing of the Waterval TSFs project include: a change to the location of the proposed pump station with the inclusion of a pre-treatment plant; the construction of at least one booster pump station along the pipeline, an amendment to the proposed pipeline route; the construction of a pollution control dam (PCD); and the addition of 4 IsaMills™ within Mainstream Inert Grinding (MIG) applications in the WLTR Plant facility. Refer to Locality Map A for a site location and proposed layout plan. The IsaMills will increase the efficiency of the WLTR by grinding the tailings material to a finer grade. The MIG Plants therefore increase the percentage of the precious metals and base metals that can be extracted from the tailings material.

**WSP Environment and Energy (WSP)** was appointed as the independent environmental assessment practitioner to undertake the environmental authorisation process for the project and to facilitate stakeholder engagement.

## ***Purpose of this Document***

This background information document (BID) introduces all stakeholders to the proposed project. This document forms part of the stakeholder consultation process, undertaken as a component of the environmental authorisation process and is intended to provide stakeholders with adequate information to comment on the project.

The BID details the project, the environmental authorisation process, the role of stakeholders in the process as well as to encourage stakeholders to comment on the project, ask questions and raise issues that should be included in the project documents. Aside from this document, at various stages of the environmental authorisation process, information and reports will be made available for stakeholders to comment on.

## ***Legal framework***

In accordance with National Environmental Management Act (No. 107 of 1998) as amended (NEMA) Environmental Impact Assessment Regulations (EIA) 2010, Government Notices (GNs) 544 and 545, the undertaking of certain listed activities requires environmental authorisation.

The activities listed in GN 544 associated with the proposed project include:

- Activity 9: The construction of facilities or infrastructure exceeding 1000 metres in length for the bulk transportation of water, sewerage or storm water-
  - I. With an internal diameter of 0.36 metres or more; or
  - II. With a peak throughput of 120 litres per second or more,
- Activity 10: The construction of facilities or infrastructure for the transmission and distribution of electricity (i) outside urban areas or industrial complexes with a capacity of more than 33 kV but less than 275 kV; or (ii) inside urban areas or industrial complexes with a capacity of 275 kV or more.
- Activity 11 (iii): The construction of bridges or infrastructure where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.
- Activity 18 (i): The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock or more than 5 cubic metres from a watercourse;
- Activity 22: The construction of a road, outside urban areas,
  - I. With a road reserve wider than 13.5 metres or,
  - II. Where no reserve exists where the road is wider than 8 metres.
- Activity 23: The transformation of undeveloped, vacant or derelict land to-
  - I. Residential, retail, commercial, recreational, industrial or institutional use, inside an urban area, and where the total area to be transformed is 5 hectares or more, but less than 20 hectares, or
  - II. Residential, retail, commercial, recreational, industrial or institutional use, outside an urban area, and where the total area to be transformed is bigger than 1 hectare but less than 20 hectares.
- Activity 47: The widening of a road by more than 6 meters, or the lengthening of a road by more than 1 kilometre – (i) where the existing reserve is wider than 13.5 meters; or (ii) where no reserve exists, where the existing road is wider than 8 meters – excluding widening or lengthening occurring inside urban areas.

The activity listed in GN 544 associated with the proposed project is Activity 6 (ii): The construction of facilities or infrastructure for the bulk transportation of dangerous goods – In liquid form, outside an industrial complex, using pipelines, exceeding 1000 metres in length, with a throughput capacity of more than 50 cubic metres per day. Application for environmental authorisation for activities listed in GN 545 requires that a Scoping and EIA process be undertaken.

The proposed pipeline route will cross a watercourse, and a new proposed pollution control dam and an emergency slurry catchment dam will be constructed. The following water use activities listed under Chapter 4, Section 21 of the National Water Act (No. 38 of 1998) (NWA) are considered relevant and will require authorisation in the form of an amended to the existing Integrated Water Use Licence (WUL):

- 21 (c): impeding or diverting the flow of water in a watercourse
- 21 (i): altering the bed, banks, course or characteristics of a watercourse
- 21 (g): disposal (storage) of water containing waste.

The proposed project is located in a mine lease area however, certain components fall on land not owned by the RPM. The RPM is required to undertake an Environmental Impact Assessment Report and Environmental Management Programme Report (EMPR) Amendment process, in line with the Minerals and Petroleum Resource Development Act (No 28 of 2002) (MPRDA). The North West Department of Economic Development, Environment, Conservation and Tourism (NWDETECT), the North West Department of Mineral Resources (NWDMR), and the Department of Water Affairs (DWA) will be responsible for authorising the NEMA EIA process, the EMPR Amendment and the Integrated WUL amendment process respectively.

### Stakeholder Consultation Process

The purpose of stakeholder engagement is to consult with interested and affected parties in the public and private sectors in the decision-making process on projects which may affect them. The process aims to develop and maintain open channels of communication between the project team and stakeholders. This process provides stakeholders with the opportunity to express their views and concerns regarding the proposed project through project correspondence. The environmental assessment practitioner documents the views and concerns of stakeholders, and makes the project team and relevant authority aware of issues that need to be considered during the compilation and evaluation of the potential risks and impacts associated with the project.

### Who is a Stakeholder?

Any person, group of persons or organisation interested and/or affected by the proposed development.

To become a registered stakeholder and to receive further correspondence about the EIA/EMPR Amendment process, or to provide comment on the proposed project, kindly send your contact details and comments to Jared O'Brien:

Tel: 011 361 1396  
Fax: 086 505 3939  
Address: P.O. Box 5384, Rivonia, 2128  
Email: Jared.O'Brien@wspgroup.co.za

A comment sheet has is attached to this document for your convenience.

## Stakeholder Engagement

The first steps are to notify the public and identified stakeholders of the proposed project and invite all stakeholders to public meetings through the following mediums:

- Newspaper advertisements in the Daily Sun and Rustenburg Herald on 29 November 2012;
- Site notices in and around the project area on 28 November 2012;
- Written notification letters to surrounding landowners and municipal ward councillors on 28-29 November 2012; and
- Distribution of the BID to stakeholders 28 November 2012.

### PUBLIC MEETING

A public meeting will be held in order to outline the details of the project to stakeholders and provide an opportunity for stakeholders to raise questions and indicate potential issues or risks associated with the project. The Public Meeting will be held at the Tshukudu High School on Wednesday the 16<sup>th</sup> of January 2013 from 16:00pm to 17:30pm.

Should you wish to attend one of the Public Meeting, please respond to Jared O'Brien by 07 January 2013.

## Scoping Report and EIAR/EMPR Amendment Report for Public Review

A Scoping Report will be compiled in accordance with the NEMA and the MPRDA, and will outline the process that will be followed for stakeholder engagement and for EIA Phase of the project. This report describes the receiving environment and will list the potential impacts of the project as identified in the Scoping Phase. The report will indicate the specialist studies (including methodologies) that will be undertaken to investigate identified impacts. The draft Scoping Report will be placed on public and state department review for a period of 40 days prior to submission to the NWDEDECT and the NWDMMR.

### PUBLIC REVIEW OF SCOPING REPORT

The Scoping Report will be made available for public review at the following venues from 29/11/2012 – 27/01/2013:

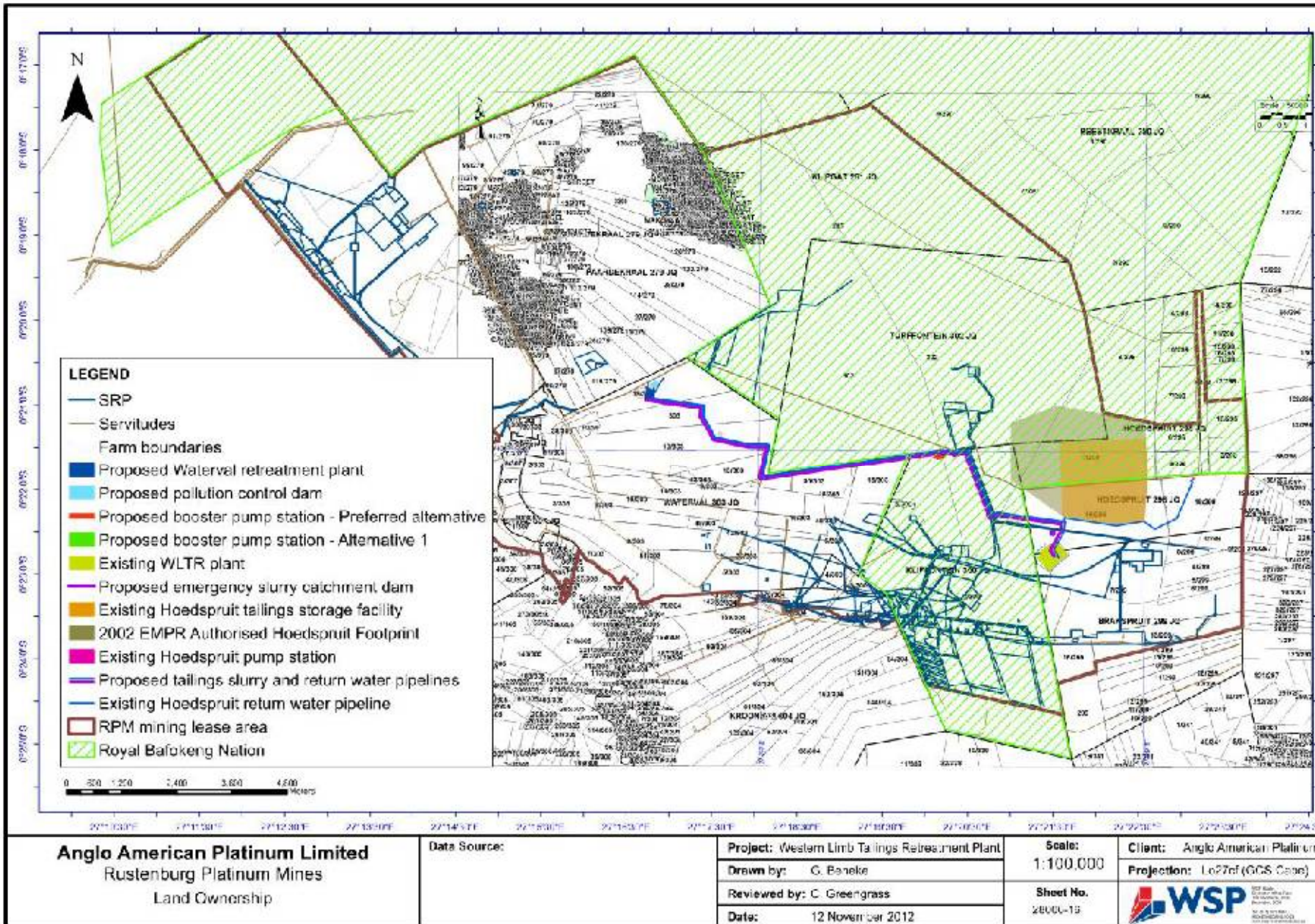
- Thekwane Tlhage Primary School;
  - Mfidike Primary School;
  - UG2 Concentrator Reception;
- Tlhabane Public Library in Rustenburg;
  - Rustenburg Local Municipality;
- Western Limb Tailings Retreatment Facility.

Subsequent to the Scoping Report, an EIAR/EMPR Amendment report will be compiled. This report will outline the stakeholder consultation process and include all comments or issues raised during the process. Additionally, the report will rate the anticipated impacts against a ratings table in order to assess the severity, duration, extent and significance of the impact, and include any cumulative impacts on the receiving environment. Mitigation measures will be developed in order to minimise negative impacts associated with the project. The draft EIAR/EMPR Amendment will also be placed on public and state department review for a period of 40 days prior to submission to the NWDEDECT and the DMR.

Kindly register with Jared O'Brien in order to receive information about the location of the draft reports and review period via email, facsimile, telephone, registered mail and/or SMS. Any comments received will be addressed and included in the report prior to the final drafts being submitted to the responsible departments for review and authorisation.



# Locality Map A





# Tsamaiso ya Tumelelo ya Tikologo malebana le tshikhinyo ya go Epa gape Ditirelopolokelo tsa Maseledi a Waterval, tsa Anglo American Platinum tse di fitlhelwang kwa Rustenburg, mo Porofenseng ya Bokonebophirima

## DOKHIUMENTETSHEDIMOSETSO YA LEMORAGO

### Tlhaloso ka botlalo ya Porojeke

Anglo American Platinum Limited: Rustenburg Platinum Mines (RPM) e fitlhelwa gaufi le Rustenburg, mo Porofenseng ya Bokonebophirima. Ditirelopolokelo tsa Waterval Tailings (diTSF), tse di fitlhelwang mo karolong ya khiri ya RPM, di fitlhelwa 4 km kwa botlhaba jwa Rustenburg, 1.5 km kwa Bophirima jwa Bokamoso, 3.5 km kwa bokone jwa Waterkloof le 3.5 km kwa borwa jwa Boitekong. Kwa tshimologong diTSF tsa Waterval (Ditirelo tsa Botlhaba le Bophirima) di ne di dirisediwa go boloka maseledi go tswa go ditiro tsa tswelotso ya diminerale. Morago ga diteko tse di dirilweng ka ga maseledi a Waterval, go lemogilwe dirasefe tse di leng teng, tse di tlhotlheleditseng gore go epiwe gape maseledi a.

Go epiwa sešwa ga diTSF go rebotswe ke Lefapha la Diminerale le Maatla (le gajaana le bidiwang Lefapha la Ditlamelwa tsa Diminerale), e le karolo ya tlhabololo ya Lenaneo la gajaana la Taolo ya Tikologo (EMPR), ka ngwaga wa 2002. Le fa go rebotswe, go epiwa gape ga maseledi a Waterval ga go ise go simolole. Diphetogo tsa gajaana malebana le dithulaganyetso tse di tshikhinngwang mmogo le bonamo jwa porojeke di tlhoka gore EMPR e tlhabololwe gape. Go feta fa, diphetogo dingwe di akaretsa ditiragalo tse di tlhokang thebolo ya tsa tikologo go tswa go Lefapha la Ikonomi le Tlhabololo, Tikologo, Pabalelo le Bojanala, la Porofense ya Bokonebophirima (NWDEDECT).

Tsamaiso ya go epa gape e akaretsa tiriso ya megogoma ya haederoliki, e e tlholang 'morwalela' wa seela godimo ga maseledi a. Diela tse di epa meselo mme di kokoanela mo megobeng. TSF ya Bophirima e tla epiwa ka dikgato di le tharo, e bong kgato ya godimo, ya magareng le ya tlase, nngwe le nngwe e le bogodimo jwa 14 m, 12 m le 12 m ka tatelano eo. TSF ya Botlhaba e tla epiwa ka dikgato di le pedi, kgato ya godimo le ya tlase, nngwe le nngwe e le bogodimo jwa 12 m. Seela se tla pompiwa (ka tiriso ya seteišene se se tshikhinngwang sa pompo), ka moselo wa peipi o o tshikhinngwang go ya kwa Polanteng ya Western Limb Tailings Retreatment (WLTR). Ka jalo porojeke e e akaretsa kago e e tshikhinngwang ya mogogoma. seteišene sa go pompela, polante e e baakanngwang, seteišene sa busetara, Tamo ya Talo ya Kgotlelego mmogo le tlhomo ya The IsaMills™ mo tirisong ya "Mainstream Inert Grinding (MIG)".

Polante ya paakanyetso e tla akarediwa le seteišene sa pompo, go akarediwa le tirelokamogelo, kanoko, ditanka tsa kgogomogo le digogomosi, tse di tshikhinngwang gore di baakanyetse seela pele se pompelwa mo polanteng ya WLTR.

Kwa planting ya WLTR, diminerale tse di mo dilwaneng tsa masaleding di tla ntshiwa mo seeleng. Kwa tshimologong polante ya WLTR e ne e agetswe go baakanyetsa dilwana tsa maseledi go tswa go TSF ya Klipfontein, e e leng 6 km kwa borwabotlhaba jwa diTSF tsa Waterval. Go epiwa gape ga TSF ya Klipfontein go lebeletswe go konosediswa ka 2014, fa go tla bong go simololwa go epiwa gape ga diTSF tsa Waterval.

Diphetogo tsa tiragatso e, tlhamo le boalo tsa go epiwa gape ga porojeke ya diTSF tsa Waterval di akaretsa: phetolo ya lefelo la seteišene se se tshikhinngwang sa pompo, go akarediwa le polante ya paakanyetso; kago ya seteišenetsosololso se le sengwe go bapa le moselo wa peipe, phetogo ya tsela ya moselo wa peipe; kago ya tamo ya taolo ya kgotlelego (PCD); le koketso ya 4 IsaMills™ mo trelong ya tshilo e e emeng (MIG) ya polante ya WLTR. Tihola Mmapa wa Selegae wa A malebana le lefelo la setsha le thulaganyo ya boalo. IsaMills e tla godisa bokgoni jwa WLTR ka go sila dilwana tsa maseledi gore di nne boleng jo bo tlhotlha. Ka jalo Dipolante tsa MIG di oketsa peresente ya metale e e ka ntshiwang go dilwana tsa maseledi.

**WSP Environment & Energy (WSP)** e tlhophilwe go nna modiredi yo o ikemetseng wa tlhatlhobo ya tikologo go diragatsa thebolo ya porojeke le go tsamaisa botsayakarolo jwa beng.

## Maikaelelo ka Dokhumente e

Dokhumente e ya tshedimisetso ya lemorago (BID) e itsise beng botlhe ka ga porojeke e e tshikhinngwang. Dokhumente e ke karolo ya tiragatso ya therisano le beng, e le karolo ya tsamaiso ya thebolo ya tikologo, mme maikaelelo ka ga yona ke go neela beng tshedimisetso e e lekanetseng gore ba kgone go tshwaela malebana le porojeke.

BID e neela dintlha tsa porojeke ka botlalo, tsamaiso ya thebolo ya tikologo, mmogo le seabe sa beng mo tsamaisong e, le go rotloetsa beng go tshwaela malebana le porojeke, le go botsa dipotso kgotsa go neela dintlha tse di tshwanetseng go akarediwa mo didokhumenteng tsa porojeke. Kwantle ga dokhumente e, go ya go neelwa tshedimisetso le dipegelo mo tsamaong ya dikgato tse di farologaneng tsa porojeke, malebana le tsamaiso ya thebolo ya tikologo, gore beng ba tshwaele.

## Letlhomiso la semolao

Go ya ka Molaotlhomiso wa Naga wa Taolo ya Tikologo (No. 107 wa 1998) o o tlhabolotsweng (NEMA), Melawana ya Tlhatlhubo ya Seabe sa Tikologo (EIA) 2010, Dikitsiso tsa Puso (GNs) 544 le 545, ditiragatso tsa ditiro dingwe tse di naneofaditsweng di tlhoka thebolo ya tsa tikologo.

Ditiragatso tse di naneofaditsweng mo go GN 544 tse di amanang le porojeke e e tshikhinngwang di akaretsetsa:

- Tiro ya 9: Kago ya ditlamelwa kgotsa dithulaganyetso tse di fetang dimetara di le 1000 ka bolelele malebana le go roriwa ga mothamo o mogolo wa -metsi, leswe le metsi a morwalela
  - I. Ka daemetha ya bogare ya dimetara di le 0.36 kgotsa go feta; kgotsa
  - II. Ka lebelolegolo la dilitara di le 120 kgotsa go feta ka motsotswana.
- Tiro ya 10: Kago ya ditlamelwa kgotsabdithulaganyetso malebana le tsamaiso le phatlalatsa ya motlakase (i) ka fa ntle ga metsetsetoropo kgotsa dikago tsa difaboriki tsa tekanyetso ya go feta 33 kV mme e le kwa tlase ga 275 kV; kgotsa (ii) mo metsetsetoropong kgotsa difaboriking ka mothamo wa 275 kV kgotsa go feta.
- Tiro ya 11 (iii) ; Kago ya marogo kgotsa dithulaganyetso fao e leng gore kago e e diragala dimetara di le 32 gaufi le moedi, go lekanyetswa go tswa losing lwa moedi, kwantle ga fa kago e dirwa ka fa morago ga mola wa leparego lengwe.
- Tiro ya 18 (i): Go tsenngwa kgotsa go tlaaleltswa ga dilwana tsa dikhiubiki tsa dimetara di le 5, kgotsa go epololwa le fa e le go tloswa ga mmu, santa, dikgetla matlapana kgotsa matlapa a go feta dikhiubiki tsa dimetara di le 5 go tswa bobolokelong;
- Tiro ya 22: Kago ya tsela, ka fa ntle ga metsetsetoropo, Activity 22:
  - I. Fao tsela e fetang bophara jwa dimetara di le 13.5 kgotsa,
  - II. Fao go seng rasefe mo tsela e leng bophara bo fetang dimetara di le 8.
- Tiro ya 23: Tlhabololo ya naga e e sa tlhabologang, le le lolea, go nna-
  - I. Felo ga bodulo, ga kgwebo, ga boitapoloso kgotsa ga difaboriki kgotsa ditheo, mo metsetsetoropong, fao lefelo le le tlhabololwang le leng bogolo jwa diheketara di le 5 kgotsa go feta, mme le le ka fa tlase ga diheketara di le 20, kgotsa
  - II. Tiriso ya lefelo ka bodulo, kgwebo, boitapoloso, difaboriki kgotsa ditheo, ka fa ntle ga metsetsetoropo, fao lefelo le le tlhabololwang le leng legolo go heketara mme le le ka fa tlase ga diheketara di le 20.
- Tiro ya 47: Gooketsa bophara jwa tsela ka dimetara di feta 6, kgotsa go e leelefatsa ka go feta kilometara - (i) fao rasefe e e leng teng e leng bophara jo bo fetang dimetara di le 13.5; kgotsa (ii) fao go se nang rasefe, mme tsela e e leng teng e le bophara jo bo fetang dimetara di le 8 – kwantle ga fa koketso ya bophar kgotsa bolelele e diragala ka fag are ga metsetsetoropo.

Tiro e e boletsweng mo go GN 544 e e golaganang le porojeke e e tshikhinngwang ke Tiro ya 6 (ii): go agiwa ga ditlamelwa kgotsa dithulaganyetso malebana le go roriwa ga bontsi jwa dilwana tse di kotsi – e le diela, ka fa ntle ga madirelo a faboriki, go dirisiwa dipeipi tsa bolelele jo bo fetang dimetara di le 1000, ka mothamo wa dikhiubiki tsa dimetara di le 50 ka letsatsi. Kopo ya thebolo ya tikologo ya ditiro tse di naneofaditsweng mo go GN 545 e tlhoka gore tsamaiso ya Scoping le EIA e diragadiwe.

Tsela e e tshikhinngwang ya metato ya dipeipi e tla kgabaganya moedi, mme tamo e ntšhwa e e tshikhinngwang ya taolo ya kgotelelego mmogo le bodutisotshoganyetso jwa diela di tla agiwa. Ditiriso tsa metsi tse di latelang, tse di neetsweng mo go Kgaolo 4, Karolo 21 ya Molaotlhomiso wa Naga wa wa Metsi (No. 38 wa 1998) (NWA), di ka nna maleba mme di ka tlhoka thebolokakaretso kgotsa Laesense e ntšhwa/e e tlhabolotsweng ya tiriso ya metsi (WUL):

- 21 (b): bobolokelo jwa metsi,
- 21 (c): kganelo kgotsa phaposo ya kelo ya metsi mo moeding,
- 21 (i): phetolo ya losi kgotsa mabopo a moedi.

Porojeke e e tshikhinngwang e fitlhelwa mo karolokhirong ya mmaene, le Fa golejalo karolo dingwe tsa lofase ha se tsa RPM. RPM e lebeleletse gone e kwale Pegelo ya Tlhatlhubo ya Seabe go Tikologo mmogo le Pegelo ya Lenaneo la Taolo ya Tikologo (EMPR) tsamaiso e e fetotsweng, go ya ka Molaotlhomiso wa Tlhabololo ya Ditlamelwa tsa Peteroliamo le Diminerale (no. 28 wa 2002) (MPRDA). Lefapha la Ikonomi le Tlhabololo, Tikologo, Pabalelo le Bojanal la Profense ya Bokonebophirima (NWDEDECT), Lefapha la Ditlamelwa tsa Diminerale la Bokonebophirima (NWDMMR), mmogo le Lefapha la Ditirelo tsa Metsi (DWA) a tla rwala boikarabelo jwa go rebola tsamaiso ya NEMA EIA, Tlhabololo ya EMPR mmogo le WUL ka tatelano eo.

### Tsamaiso ya therisano ya beng

Maikaelelo ka go akaretsa le beng ke go rerisana le ditokololo tse di amegangmo maphateng a botlhe le a poraefete malebana le tsamaiso ya go tsaya tshwetso malebana le diporojeke tse dib a amang. Tsamaiso e e ikaelela go godisa le go tshola tlhaeletsano magareng a setlhopha sa porojeke le beng. Tsamaiso e e neela beng tšhono ya go tlhagisa dikakanyo le tshwenyego ya bona malebana le porojeke e e tshikhinngwang ka mosele wa tlhaeletsano. Modiredi wa tlhatlhubo ya tikologo o kwala dikakanyo le tshwenyego ya beng, mme o tsibosa setlhopha sa porojeke mmogo le bathati ba ba maleba malebana le dintlha tse di tlhokang go tsewa tsia ka nako ya kokoanyo ya dintlha tsa kotsi le seabe tse di amanang le porojeke.

### Beng ke bomang?

Mongwe fela, kgotsa setlhopha sa batho le fa e le mokgatlho o o nang le kgatlhego kgotsa o amega mo tlhabolong e e tshikhinngwang.

Go nna mong yo o ikwaditseng le go amogela tlhaeletsano ka ga tsamaiso ya Tlhabololo ya EIA/EMPR, kgotsa go tshwaela malebana le porojeke e e tshikhinngwang, tsweetswee romela dintlha tsa gago tsa tlhaeletsano le tshwaelo ya gago go Jared O'Brien:

Tel: 011 361 1396  
Fax: 086 505 3939  
Address: P.O. Box 5384, Rivonia, 2128  
Email: Jared.O'Brien@wspgroup.co.za

Papetlana ya ditshwaelo e mametleletswe mo dokhumenteng e go o thusa.

## Botsaakarolo jwa Beng

Kgato ya ntlha ke go itsise morafe le beng ba ba lemogilweng, malebana le porojeke e e tshikhinngwang, le go laletsa beng botlhe pitso, ka meselo e e latelang:

- Papatso ya kuranta mo go Daily Sun le Rustenburg Herald ka la 29 Ngwanatsele 2012;
- Dikitsiso mo setsheng le mo karolong ya porojeke ka la 28 Ngwanatsele 2012;
- Makwalokitsiso go benglefatshe ba ba mabapi le bakhanselara ka la 28-29 Ngwanatsele 2012; le
- Phasalatso ya BID go beng ka la 28 Ngwanatsele 2012.

### DIPITSO TSA BOTLHE

Dipitso tsa botlhe di tshwarwa go tlhalosetsa beng diteng tsa porojeke le go ba neela tšhono ya go botsa dipitso le go supa dintlha le kotsi tse di tsamaelanang le porojeke. Ka jalo beng ba biletswa pitsong e:

- Sekolo se segole sa Tshukudu (16/01/2013, 16:00pm - 17:30pm)

Fa o tlhoka kaelotsela go ya go lengwe la mafelo a, tsweetswee romela kopo go Jared O'Brien (07/01/2013).

## Pegelo ya Bonamo le pegelo ya Paakanyo ya EIAR/EMPR go thadiswa ke morafe

Pegelo ya bonamo e tla kokoangwa go ya ka NEMA le MPRDA, mme e tla tlhalosa tsamaiso e e tla latelwang malebana le seabe sa beng mo Kgatong ya EIA ya porojeke. Pegelo e, e tlhalosa tikologokamogelo mme e tla neela lenaneo la seabe sa diporojeke jaaka se lemogilwe mo kgatong ya Bonamo. Pegelo e tla supa tshakatsheko ya baitseanape (go akarediwa mekgwatshekatsheko), e e tla dirwang go batlisisa seabe se se lemogilweng. Pegelothomo ya Bonamo e tla neelwa morafe le mafapha a puso malatsi a le 40 pele e ka neelwa NWDEDECT le NWDMMR.

### TTHADISO YA MORAFE YA PEGELO YA BONAMO

Dikhophi tsa Pegelo ya Bonamo di tla neelwa morafe kwa mafelong a a latelang go simolola ka la 29/11/2012 – 27/01/2012:

- Sekolopotlana sa Thekwane Tlhage;
- Sekolopotlana sa Mfidike;
- Kantorong ya kamogelo ya UG2 Concentrator;
- Tlhabane Librarya ya botlhe, Rustenburg;
- Rustenburg Masepala wa selegae;
- Ditabakelo tsa Bophiriwa Limb Tailings Retreatment Facility.

Fa o tlhoka kaelotsela go ya go lengwe la mafelo a, tsweetswee romela kopo go Jared O'Brien.

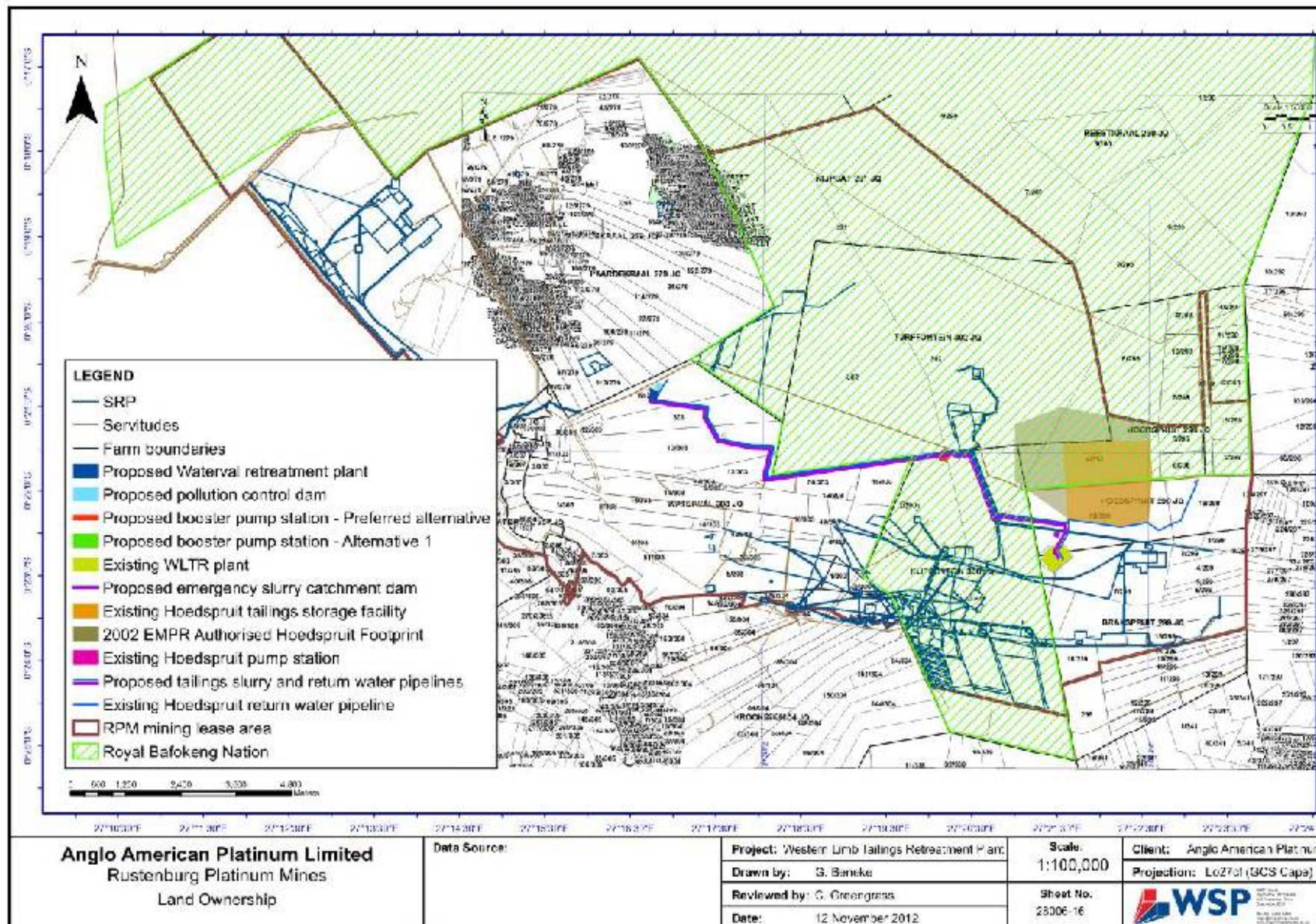
Morago ga Pegelo ya Bonamo, pegelo e e Baakantsweng ya EIAR/EMPR e tla kokoangwa. Pegelo e, e tla tlhalosa tsamaiso ya kgokagano le beng mme e tla akaresa ditshwaelo tsothe kgotsa dintlha tse di runseng ka nako ya tsamaiso e. Go feta fa, pegelo e tla leba kelo ya khetso kgatlhanong le papetla ya kelo ka maikaelelo a go tlhatlhuba mothamo, paka le boleng jwa khetso, mme e tla akaretsa khetso yotlhe go tikologo e e amogelang. Dikgato tsa go timola bogale di tla tsewa go fokotsa seabe sa bosula malebana le porojeke. Paakanyothomo ya EIAR/EMPR e tla itsisiwe morafe le mafapha a puso go e thadisa malatsi a le 40 pele e neelwa NWDEDECT le DMR.

Tsweetswee ikwadise le Jared O'Brien gore o kgone go amogela tshedimose tsothe malebana le mafelo a dipegelo le paka ya thadiso ka imeile, fekese, mogala, poso kgotsa /le SMS. Ditshwaelo tsothe tse di amogelang di tla lejwa le go akarediwa mo pegelong pele pegelothomo ya bofelo e neelwa mafapha a a maleba go thadisiwa le go rebolwa.





# Mmapa wa Lefelo A



## 4.4 Newspaper Adverts



## ENVIRONMENTAL AUTHORISATION

**Notice of the Environmental Authorisation processes for the proposed re-processing of Anglo American Platinum Waterval Tailings Storage Facilities located in Rustenburg, North West Province.**

Notice is hereby given in accordance with the National Environmental Management Act (No. 107 of 1998) as amended (NEMA), Environmental Impact Assessment (EIA) Regulations 2010, Government Notice Regulation (GN. R) 543, Section 21 of the National Water Act (No. 36 of 1998) (NWA) as well as the Mineral and Petroleum Resource Development Act (No 28 of 2002) (MPRDA) for the proposed re-processing of the Waterval Tailings Storage Facilities (TSFs) at the Anglo American Platinum Limited Rustenburg Platinum Mines Limited (RPM).

### DESCRIPTION AND LOCATION

RPM mining operations are located in Rustenburg in the North West Province. RPM proposes to re-process the Waterval Tailings Storage Facilities. The project includes (but is not limited to) the proposed construction of a pipeline with a pump station, a pre-treatment plant, a booster station, a pollution control dam, an increase in the height of the Hoedspruit Tailings Storage Facility and the installation of IsMIB™ within Mainstream Inert Grinding (MIG) applications within the existing Western Limb Tailings Retreatment (WLTR) Plant. The tailings material will be piped to and processed at the existing WLTR Plant. The construction and the operational phases of the project are expected to commence in Q4 of 2013 and Q1 of 2015, respectively.

### ENVIRONMENTAL APPLICATION

In accordance with the NEMA GN. R 543, the undertaking of certain listed activities requires environmental authorisation. The activities associated with the proposed project listed in GN. R 544 include: Activity 9, 10, 11, 16, 22 and 23 and 47. Additionally, Activity 6 of GN. R 546 was identified which requires a Scoping and EIA Process to be undertaken. An application for authorisation was submitted to the North West Department of Economic Development, Environment, Conservation and Tourism on 21 August 2012.

Water uses 21 (d), (i) and (j) listed under Section 21 of the National Water Act (No. 36 of 1998) are considered relevant and will need re-authorisation from the DWA in the form of an amendment to the existing Integrated Water Use License. The proposed project is located in a mine lease area however, certain components fall on land not owned by the RPM. The RPM is required to undertake an Environmental Management Programme Report Amendment process, in line with the MPRDA and its associated Regulations of 2004.

### AVAILABILITY OF SCOPING REPORT

The Scoping report will be made available for public review at the following locations: Thekwane Tlhaga Primary School, Midjike Primary School, Fraser Alexander Offices, Thabane Public Library, Rustenburg Local Municipality, the WLTR facility, and on WSP's website ([www.wspenvironmental.com/publicreview/](http://www.wspenvironmental.com/publicreview/)) from 29 November 2012 to 27 January 2013.

### NAME OF PROPONENT

Anglo American Platinum Limited, Rustenburg Platinum Mines Limited (RPM)

### NAME OF CONSULTANT

WSP Environment and Energy

Contact Person:

Jared O'Brien

T: 011 361 1395

F: 084 605 3539

E: [Jared.O'Brien@WSPenvironmental.com](mailto:Jared.O'Brien@WSPenvironmental.com)

PO Box 5384, Rixevia, 0120

### REGISTER AS A STAKEHOLDER

To register as a stakeholder, please submit your name, contact information and interest in the matter to the Consultant.



# NOTICE OF A PUBLIC MEETING FOR ENVIRONMENTAL AUTHORISATION

**Notice of a public meeting for  
the Environmental Authorisation  
Processes for the proposed  
re-processing of Anglo American  
Platinum Waterval Tailings  
Storage Facilities located in  
Rustenburg, North West Province.**

Notice is hereby given in accordance with the National Environmental Management Act (No. 107 of 1998) as amended Environmental Impact Assessment Regulations 2010, Government Notice Regulation 543, Section 21 of the National Water Act (No. 38 of 1998), as well as the Mineral and Petroleum Resource Development Act (No 28 of 2002) for a public meeting for the proposed re-processing of the Waterval Tailings Storage Facilities (TSFs) at the Anglo American Platinum Limited: Rustenburg Platinum Mines Limited.

The public meeting will be held in order to outline the details of the proposed project to stakeholders and provide an opportunity for stakeholders to raise questions and indicate potential issues or risks associated with the proposed project.

## **DETAILS OF PUBLIC MEETING**

**Venue:** Tshukudu High School  
**Date:** Wednesday 16 January 2013  
**Time:** 16:00pm to 17:30pm

Should you wish to register as a stakeholder and/or attend the Public Meeting, please respond to Jared O'Brien prior to 16 January 2013.

## **NAME OF CONSULTANT WSP Environment and Energy**

**Contact Person:**  
**Jared O'Brien**  
T 011 361 1396  
F 086 505 3939  
E [Jared.OBrien@WSPgroup.co.za](mailto:Jared.OBrien@WSPgroup.co.za)  
PO Box 5384, Rivonia, 2128



4.5 Letters of Notification of EIA Process, Public / Focus Group meeting and Scoping Report for review

29/11/2012

Dear Stakeholder

### **Environmental Authorisation Processes for the proposed Re-processing of the Anglo American Platinum Waterval Tailings Storage Facilities located in Rustenburg, North West Province**

Anglo American Platinum Limited: Rustenburg Platinum Mines Limited (RPM) is situated near Rustenburg, in the North West Province. The Waterval Tailings Storage Facilities (TSFs), which are positioned in the RPM lease area, are located 4 km east of Rustenburg, 1.5 km west of Bokamoso, 3.5 km north of Waterkloof and 3.5 km south of Boitekong. The Waterval TSFs (East and West dams) were previously used to deposit tailings material from mineral processing operations. Following tests conducted on the Waterval tailings, latent reserves have been identified that warrant the re-processing of the tailings. The re-processing of the Waterval TSFs was authorised by the Department of Minerals and Energy (now the Department of Mineral Resources) as part of an amendment to the existing Environmental Management Programme Report (EMPR) in 2002. Although authorised, the re-processing of the Waterval tailings has not yet commenced and recent changes to proposed infrastructure and the layout of the project require the EMPR to be amended again. Additionally, some of the changes involve activities for which environmental authorisation from the North West Provincial Department of Economic Development, Environment, Conservation and Tourism (NWDEDECT) will be required.

The re-processing activity involves the use of hydraulic hoses, which sluice the mining face of the tailings. The resulting slurry collects in a sump via a system of drains or launders. The launder will extend from the southern portion of each TSF toward the collection sump. Two satellite pump stations will be installed within the launders to ensure that the coarse washed material reaches the collection sump. The Western Dam will be mined in three benches, namely an upper, middle and lower bench, each 14 m, 12 m and 12 m in height respectively. The Eastern Dam will be mined in two benches, an upper and lower bench, each being 12 m in height. The slurry will then be pumped (via a proposed pump station) through a proposed pipeline to the Western Limb Tailings Retreatment (WLTR) Plant.

A pre-treatment plant will be incorporated into the pump station, including a receiving facility, screening, surge tanks and thickeners, which are proposed to pre-treat the slurry before piping it to the WLTR Plant. The pre-treatment plant will also be used for water recovery prior to piping the slurry to the WLTR plant. The pipeline route has been selected based on numerous determining factors, including gradient, land ownership, existing servitudes and land stability.

At the WLTR plant, the minerals contained in the tailings material will be extracted from the slurry. The WLTR Plant was initially constructed to re-treat tailings material from the Klipfontein TSF, which is located 6 km south east of the Waterval TSFs. The re-processing of the Klipfontein TSF is expected to reach completion in 2015, at which point the re-processing of the Waterval TSFs will be initiated.

The process, design and layout changes to the re-process of the Waterval TSFs project include: a change to the location of the proposed pump station with the inclusion of a pre-treatment plant; the construction of at least one booster pump station along the pipeline; the addition of two satellite pump stations within the launders; a pollution control dam; an amendment to the proposed pipeline route; an increase in the height of the Hoedspruit TSF to incorporate the tailings material from the re-processing of the Waterval TSFs and the addition of 4 IsaMills™ within Mainstream Inert Grinding (MIG) applications within the WLTR Plant facility. Refer to Appendix A: Locality Map for site location and the proposed layout plan.

In accordance with National Environmental Management Act (No. 107 of 1998) as amended (NEMA) Environmental Impact Assessment Regulations (EIA) 2010, Government Notices (GN. Rs) 544 and 545, the undertaking of certain listed activities requires environmental authorisation.

The activities listed in GN. R 544 associated with the proposed project include:

- Activity 9;
- Activity 10;
- Activity 11 (iii);
- Activity 18 (i);
- Activity 22;
- Activity 23; and
- Activity 47.

The activity listed in GN. R 545 associated with the proposed project is Activity 6 (ii): The construction of facilities or infrastructure for the bulk transportation of dangerous goods – In liquid

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form, outside an industrial complex, using pipelines, exceeding 1000 metres in length, with a throughput capacity of more than 50 cubic metres per day. Application for environmental authorisation for activities listed in GN. R 545 requires that a Scoping and EIA process be undertaken.

The proposed pipeline route will cross a watercourse at three locations, and a proposed pollution control dam will be constructed. The following water use activities listed under Chapter 4, Section 21 of the National Water Act (No. 38 of 1998) (NWA) are relevant and will require authorisation in the form of an amendment to the existing Integrated Water Use License (WUL):

- 21 (c): impeding or diverting the flow of water in a watercourse,
- 21 (i): altering the bed, banks, course or characteristics of a watercourse, and
- 21 (g): disposing of waste in a manner which may detrimentally impact on a water resource.

The proposed project is located in a mine lease area however, certain components fall on land not owned by the RPM. The RPM is required to undertake an Environmental Management Programme Report (EMPR) Amendment process in conjunction with the Environmental Impact Assessment (EIA) process, which is in line with the Minerals and Petroleum Resource Development Act (No 28 of 2002) (MPRDA) and the NEMA, respectively. The North West Department of Economic Development, Environment, Conservation and Tourism (NWDEDECT), the North West Department of Mineral Resources (DMR), and the Department of Water Affairs (DWA) will be responsible for authorising the NEMA EIA process, the EMPR Amendment and the Integrated WUL amendment process respectively.

A Public meeting will be held in order to outline the details of the project to stakeholders and provide an opportunity for stakeholders to raise questions and indicate potential issues or risks associated with the project. The Public Meeting will be held at the Tshukudu High School on Wednesday the 16th of January 2013 from 16:00pm to 17:30pm.

Should you wish to attend the Public Meeting, please respond to Jared O'Brien by 07 January 2013.

Should you wish to register as a stakeholder, please submit your details to Jared O'Brien.

Should you have any questions, please do not hesitate to contact the undersigned.

Regards,

A handwritten signature in black ink, appearing to read 'Jared O'Brien', is written over a horizontal line.

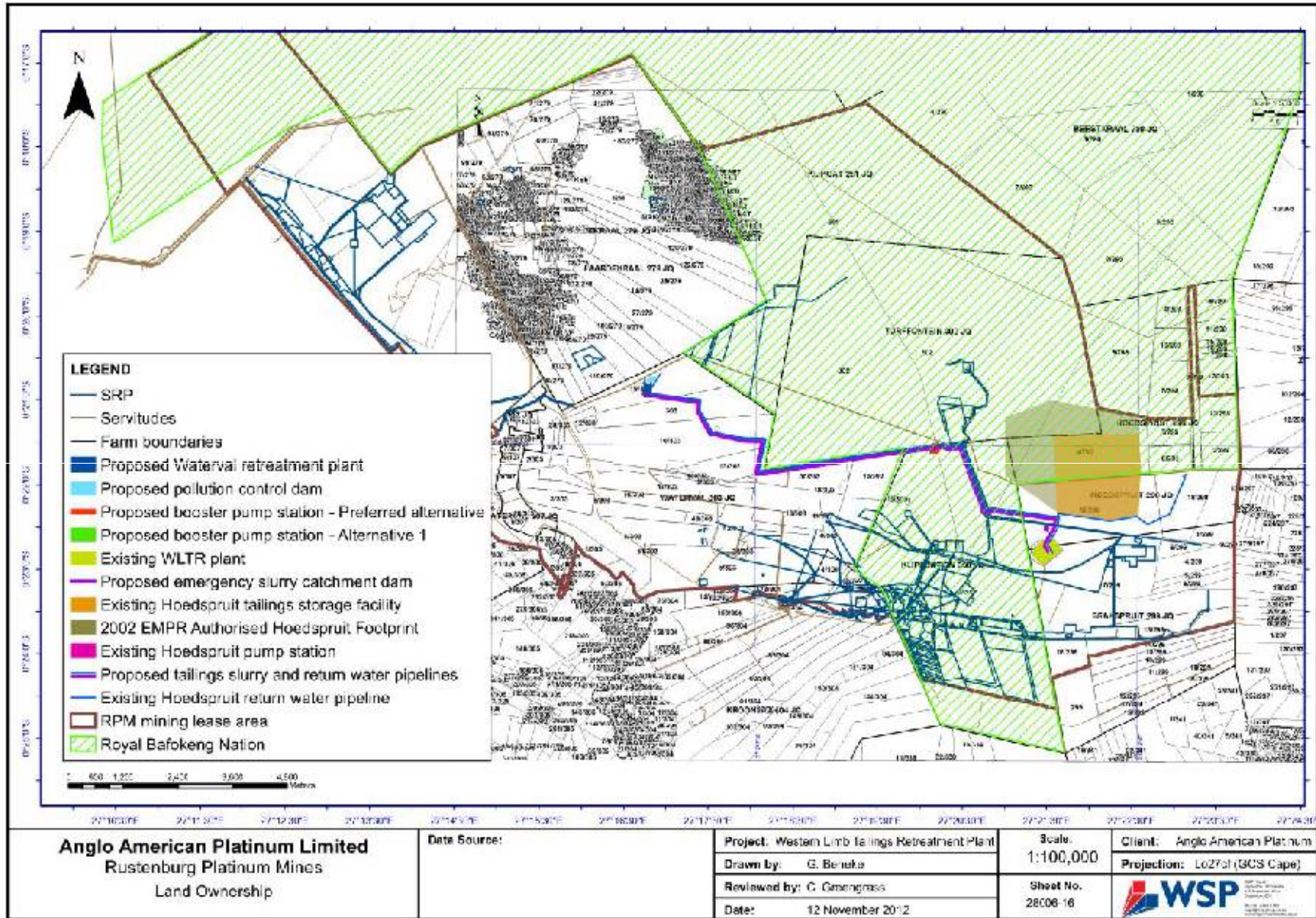
**Jared O'Brien**  
**Consultant**

Tel: 011 361 1396

Fax: 086 505 3939

Email: Jared.O'Brien@wspgroup.co.za

Locality Map A



17/09/2012

Royal Bafokeng Holdings and Administration

To Whom it may concern

**Landowner Notification; Environmental Authorisation Processes for the proposed Re-processing of Anglo American Platinum's Waterval Tailings Storage Facilities located in Rustenburg, North West Province**

1. Notification

Anglo American Platinum Limited: Rustenburg Platinum Mines Limited (RPM) proposes the re-processing of Waterval Tailings Storage Facilities located in Rustenburg, North West Province. Portions of the footprint of the proposed project fall on land owned by the Royal Bafokeng Holdings. Notification of an Environmental Impact Assessment (EIA) is therefore hereby given, in terms of National Environmental Management Act (No. 107 of 1998) as amended (NEMA) and section 15 (1) of the EIA Regulations in Government Notice (GN) 543 of 2010, which states:

*If the applicant is not the owner or person in control of the land on which the activity is to be undertaken, the applicant 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, and inform such person that he may participate in the public participation process.*

2. Project Background

The Waterval TSFs (East and West dams) were previously used to deposit tailings material from mineral processing operations. Following tests conducted on the Waterval tailings, latent reserves have been identified that warrant the re-processing of the tailings. The re-processing of the Waterval TSFs, including associated infrastructure, was authorised by the Department of Minerals and Energy (now the Department of Mineral Resources – DRM) as part of an amendment to the existing Environmental Management Programme Report (EMPR) in 2002. Although authorised, the re-processing of the Waterval tailings has not yet commenced and recent changes to proposed infrastructure and the layout of the project require the EMPR to be amended again. Additionally, some of the changes involve activities for which environmental authorisation from the North West Provincial Department of Economic Development, Environment, Conservation and Tourism (NWDEDECT) will be required.

3. Proposed Activities and Authorisation processes required

In accordance with NEMA, GN. 544 and 545, the undertaking of certain listed activities requires environmental authorisation.

The activities listed in GN. R 544 associated with the proposed project include:

- Activity 9;
- Activity 10;
- Activity 11 (iii);
- Activity 18 (i);
- Activity 22;
- Activity 23; and
- Activity 47.

The activity listed in GN. R 545 associated with the proposed project is:

- Activity 6 (ii): The construction of facilities or infrastructure for the bulk transportation of dangerous goods – in liquid form, outside an industrial complex, using pipelines, exceeding 1000 metres in length, with a throughput capacity of more than 50 cubic metres per day.

Application for environmental authorisation for activities listed in GN. R 545 requires that a Scoping and EIA process be undertaken, as such, an application in this regard was submitted to NWDEDECT on 21 Sept 2012.

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The proposed pipeline route will cross a watercourse, and a proposed pollution control dam and an emergency slurry catchment dam will be constructed. The following water use activities listed under Chapter 4, Section 21 of the National Water Act (No. 38 of 1998) (NWA) may be relevant and may require authorisation in the form of a general authorisation or new/amended Water Use License (WUL):

- 21 (c): impeding or diverting the flow of water in a watercourse,
- 21 (i): altering the bed, banks, course or characteristics of a watercourse, and
- 21 (g): disposing of waste in a manner which may detrimentally impact on a water resource.

Portions of the proposed project is located in a mine lease area, as such RPM are required to undertake an Environmental Management Programme Report (EMPR) Amendment process in conjunction with the EIA process, which is in line with the Mineral and Petroleum Resource Development Act (No 28 of 2002) (MPRDA) and the NEMA, respectively.

#### 4. Public Participation Process

The RBH has been registered as a Stakeholder to receive information from WSP as the EIA process progresses and is hereby invited to participate in the process by sending any comments or queries to the undersigned.

Regards,

A handwritten signature in black ink, appearing to read 'Jared O'Brien', is written over a faint horizontal line.

Jared O'Brien  
Consultant

Tel: 011 361 1396

Fax: 086 505 3939

Email: Jared.O'Brien@wspgroup.co.za

## 4.6 Issues Trail

## Scoping Report Issues Trail – as of 23 November 2012

Issue and Concerns	Date	Commentator	Organisation	Source	Response
<b>Landowner Meeting</b>					
RBH wished to verify that the area upon which the project and the Hoedspruit Tailings Storage Facility (TSF) is located is part owned by the, RBH, FIKE Trust (for which a lease agreement is in place) and part owned by Anglo American Platinum (AAP). She subsequently requested that Andre Britz (AB) of AAP send her all the relevant portion numbers for the Hoedspruit TSF, and for the rest of the project area.	17/09/2012	Teresa Taljaard	Royal Bafokeng Holdings	Landowner Notification Meeting	Maps provided 8 October and 11 November 2012 (WSP letter 11 Nov 2012).
Ernie Kemm (EK) questioned the crossing of the powerlines along the proposed pipeline route.	17/09/2012	Ernie Kemm	Royal Bafokeng Administration	Landowner Notification Meeting	Pierre Malan (PM) responded indicating that Anglo have appointed Green Gain (legal consultant) to ensure legal compliance in terms of the crossings.
EK questioned the location of the proposed booster station and pipeline route, adding that he believes there may be housing stands allocated on the land proposed.	17/09/2012	Ernie Kemm	Royal Bafokeng Administration	Landowner Notification Meeting	PM said the land has been inspected and the land is currently vacant.
Khalid Patel (KP) questioned which components of the proposed project are within the Anglo mine lease area and which lie outside of the mining lease area. KP subsequently requested detailed mapping of exactly where Anglo's mining rights are currently.	17/09/2012	Khalid Patel	EIMS Consultant: Mining Division Manager (on behalf of the RBN)	Landowner Notification Meeting	Maps provided 8 October and 11 November 2012 (WSP letter 11 Nov 2012).
KP indicated that he will review the	17/09/2012	Khalid Patel	EIMS Consultant:	Landowner Notification	Noted.



Issue and Concerns	Date	Commentator	Organisation	Source	Response
information (including the map) presented during the meeting along with the SG mapping and decide if the RBN is impacted upon by the project.			Mining Division Manager (on behalf of the RBN)	Meeting	
EK asked on which side of the property boundary the slurry/return water pipeline will be located.	17/09/2012	Ernie Kemm	Royal Bafokeng Administration	Landowner Notification Meeting	AB indicated it would be on the southern side which is Rustenburg Local Municipality (RLM) land. AB added there is an existing pipeline corridor for which servitudes are not yet registered. An agreement for the pipeline corridor on the RLM land is however in place.
TT emphasised that the future of the project is dependent on the consent of the RBN, which will be subject to the amicable resolution of the current and wider lease agreement adjudication. Therefore, if their requirements are not met, RBN will oppose the project. TT emphasised that RBNs comments need to be included in the process and this must be made known.	17/09/2012	Teresa Taljaard	Royal Bafokeng Holdings	Landowner Notification Meeting	WSP noted the comment. AB added that there is currently a separate process in progress to resolve the lease agreement with the RBN (Royalties).
Reotshopile Tihapane (RT) queried if Dudu Ratshefola (DR) from Anglo is involved in the arranging of the public meetings and the rest of the PPP.	17/09/2012	Reotshopile Tihapane	Royal Bafokeng Administration: Environmental	Landowner Notification Meeting	CG indicated that DR has been involved thus far. CG stated that WSP will communicate with RT in terms of PPP going forward.
KP requested that he be registered on the database PPP notifications.	17/09/2012	Khalid Patel	EIMS Consultant: Mining Division Manager (on behalf of the RBN)	Landowner Notification Meeting	Registered by WSP.
KP queried the initiation date of PPP.	17/09/2012	Khalid Patel	EIMS Consultant: Mining Division	Landowner Notification	CG said that WSP would like to have initiated PPP soon after this meeting, however, PPP was on hold as a

Issue and Concerns	Date	Commentator	Organisation	Source	Response
			Manager (on behalf of the RBN)	Meeting	result of the current unrest in Rustenburg.
KP questioned the need to undertake Water Use License amendment (WULA) for the project, and if so which water uses will trigger the amendment.	17/09/2012	Khalid Patel	EIMS Consultant: Mining Division Manager (on behalf of the RBN)	Landowner Notification Meeting	A WULA amendment will be required for the river crossing and the Pollution Control Dam.
TT requested a timeline for the WUL amendment and if the RBH will be informed of the amendment.	17/09/2012	Teresa Taljaard	Royal Bafokeng Holdings	Landowner Notification Meeting	Unknown at this stage.
TT re-emphasised that if the RBH are not informed, as a landowner then RBH they will oppose the project.	17/09/2012	Teresa Taljaard	Royal Bafokeng Holdings	Landowner Notification Meeting	Noted.
KP questioned the word "may" in the BID referring to the need to undertake a WULA. He believes the existing WUL will need to be amended or a new WULA application will need to be submitted based on the project description. KP indicated that clear information on water uses needed to be provided.	17/09/2012	Khalid Patel	EIMS Consultant: Mining Division Manager (on behalf of the RBN)	Landowner Notification Meeting	The existing integrated WUL will be amended.
RT asked where the wetland areas are for which the aquatic study is being conducted.	17/09/2012	Reotshopile Tihapane	Royal Bafokeng Administration: Environmental	Landowner Notification Meeting	CG indicated this area to be on the north-eastern side of the Waterval west Dam. AB indicated the Klipgat river running from west to east, crossing the pipeline in a certain stages.
KP questioned the submission of WSP's environmental application form.	17/09/2012	Khalid Patel	EIMS Consultant: Mining Division	Landowner Notification Meeting	CG indicated it had been submitted to NWDEDECT. Copy provided in WSP letter of 11 November 2012.

Issue and Concerns	Date	Commentator	Organisation	Source	Response
			Manager (on behalf of the RBN)		
KP stated that according to the new environmental legislation the applicant is required to include proof of communication with relevant landowners with the application for authorisation.	17/09/2012	Khalid Patel	EIMS Consultant: Mining Division Manager (on behalf of the RBN)	Landowner Notification Meeting	Proof of communication with RBH is included in the Scoping Report. Proof of future discussions with other landowner (Makhatle Tribe and Fike Trust) will be included in the Final Scoping Report that will be submitted to the NWDEDECT and DMR for approval.
KP asked if a Section 102 process in terms of the MPRDA would be conducted. KP requested that WSP/Anglo inform him once the application is lodged.	17/09/2012	Khalid Patel	EIMS Consultant: Mining Division Manager (on behalf of the RBN)	Landowner Notification Meeting	CG indicated that the process to be undertaken would be an EMPR amendment with the first submission to the DMR being the Scoping Report.
RT questioned the need for a traffic impact assessment, questioning the extent of the expected impact.	17/09/2012	Reotshopile Tihapane	Royal Bafokeng Administration: Environmental	Landowner Notification Meeting	CG said that during the construction phase, trucks will utilise the surrounding roads, however the impact is expected to be low during operation (slurry transported via pipeline).  Information regarding the traffic study has been included in the Scoping Report.
RT and TT requested information on sensitive social receptors which may be influenced by the project e.g. schools, old age homes, disabled homes, etc. She requested a map indicating the location of the receptors relative to the project layout.	17/09/2012	Reotshopile Tihapane / Teresa Taljaard	Royal Bafokeng Administration: Environmental / Royal Bafokeng Holdings	Landowner Notification Meeting	Map in WSP letter of 11 Nov 2012.
KP asked which alternatives had been considered for the project.	17/09/2012	Khalid Patel	EIMS Consultant: Mining Division Manager (on behalf of the	Landowner Notification Meeting	PM responded saying the route indicated on the presentation is the final preferred route. He described that many (approximately 6) pipeline routes had been

Issue and Concerns	Date	Commentator	Organisation	Source	Response
			RBN)		considered for the project during the 2002 EMPR.
TT asked if the designs submitted to RBH as part of the lease application process were final. She emphasised that should designs change after any lease for servitudes had been agreed to, the lease application process with the RBH would need to start again from the beginning.	17/09/2012	Teresa Taljaard	Royal Bafokeng Holdings	Landowner Notification Meeting	PM responded yes. Comment noted.
KP requested that RBH be provided with the specialist "Terms of Reference" (TOR).	17/09/2012	Khalid Patel	EIMS Consultant: Mining Division Manager (on behalf of the RBN)	Landowner Notification Meeting	Specialist methodologies (TORs) are included in the Scoping Report.
KP enquired whether pollution plume modelling will be done during the project.	17/09/2012	Khalid Patel	EIMS Consultant: Mining Division Manager (on behalf of the RBN)	Landowner Notification Meeting	AB said pollution monitoring is currently taking place.
RBN asked if they will receive the minutes from Department meetings and Fike trust meetings in the future.	17/09/2012	Unknown	RBN	Landowner Notification Meeting	CG indicated that these would form part of the documents produced in the process (Scoping and EIA reports).
<p>KP requested the following information:</p> <ul style="list-style-type: none"> <li>■ A map with both parent farms and associated portions on which the proposed pipeline, plants and tailings facility will be located;</li> <li>■ The exact extent (in hectares) that the tailings storage facility on Hoedspruit</li> </ul>	18/09/2012	Khalid Patel	EIMS Consultant: Mining Division Manager (on behalf of the RBN)	Email	Map and list of landowners provided in WSP letter of 11 November 2012. Information on the Hoedspruit TSF is provided in the Scoping report.

Issue and Concerns	Date	Commentator	Organisation	Source	Response
<p>will occupy;</p> <ul style="list-style-type: none"> <li>■ A copy of the NEMA application already submitted; and</li> <li>■ A list of landowners already identified.</li> </ul>					
<p>KP requested that he is informed when WSP understand exactly what water uses will be applied for and over which properties. He further requested that the terms of reference (once drawn up) for the specialist studies are sent to him.</p>	18/09/2012	Khalid Patel	EIMS Consultant: Mining Division Manager (on behalf of the RBN)	Email	No response issued to date.
<b>Stakeholder Comments</b>					
<p>Public participation and Scoping Report review commences 29 November 2012. No comments were received by WSP from other stakeholders prior to this.</p>	23/11/2012	Catherine Greengrass (WSP)	WSP	N/A	N/A