

Environmental Authorisation and Waste Management License for the proposed Decommissioning and Remediation of the Tar Dams at Rustenburg Platinum Mines Basic Assessment Process

BACKGROUND INFORMATION DOCUMENT

Purpose of this document

This background information document (BID) introduces all stakeholders to the proposed decommissioning and remediation of the tar dams, within the mine lease area of Rustenburg Platinum Mines Limited (RPM), near Rustenburg, North West Province.

The BID provides a brief project description, the environmental authorisation process to be followed, and the role of stakeholders in the process including the opportunity for members of the public to

register as stakeholders. Stakeholders are invited to participate in the environmental authorisation process by commenting on the project, asking questions and raising issues that will be included in the project documents. In addition to this document, at various stages of the environmental authorisation process, information and reports will be made available for registered stakeholders to comment on.

WSP Environment and Energy (WSP) has been appointed by RPM as the independent environmental assessment practitioner (EAP) to undertake the environmental authorisation and waste management license process for the project and to facilitate stakeholder engagement.

To become a registered stakeholder and ensure all comments and queries regarding this project are accurately documented and addressed, please forward your contact details and comments by the 28 March 2012 on the attached *response sheet* to:

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



Legal framework

Notice is hereby given in terms of the National Environmental Management Act (No. 107 of 1998), as amended (NEMA), with specific reference to the Environmental Impact Assessment Regulations (EIA) 2010, Government Notice Regulation (GNR.) 543 and 544, as well as the National Environmental Management Waste Act (No. 59 of 2008) (NEM:WA), GNR.718 of 2009 with the intent to decommission and remediate the area associated with the Bleskop and TEMSO Tar Dams at RPM.

The project involves undertaking the following listed activity contained in the EIA NEMA Regulations GNR.544 of 2010:

- Activity 27(iv)
 - The decommissioning of existing facilities or infrastructure for activities, where the facility or land on which it is located is contaminated.

The following waste management activities listed in the NEM:WA GNR.718 of 2009 are also considered relevant:

- Category A, Activity 12
 - The remediation of contaminated land.

- Category A, Activity 20

- The decommissioning of activities listed in GNR.718 Category A.

As activities contained in GNR.544 and GNR.718 are triggered, and in order for environmental authorisation and a waste management license to be granted, a basic assessment (BA) process is required in accordance with NEMA EIA Regulations. An integrated BA and waste management license application form has been submitted, in terms of the NEMA and NEM:WA, to the Department of Environmental Affairs (DEA), who will be the competent authority for this project.

Stakeholder engagement process

The purpose of stakeholder engagement is to consult with interested and affected parties in the public and private sectors during 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 the public and stakeholders with the opportunity to openly express their views and concerns regarding the project through project correspondence. The EAP documents the comments 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.

Detailed Project Description

Rustenburg Platinum Mines Limited (RPM) has four existing empty tar dams within their mine lease area near Rustenburg, North West Province. The empty tar dams contained legacy residues that were generated from the gas fired smelter at Klipfontein, which existed more than 60 years ago. The tar residue from the smelter was stored in four separate clay-lined, soil compartments. Each empty tar dam is approximately 1600m² in size and contained an estimated 3200m³ of tar residue. Tar Dam footprints A and B (referred to as the Bleskop Tar Dams) are located between the Bleskop Stadium and the RPM Hospital, while Tar Dam footprints C and D (referred to as the TEMSO Tar Dams) are located north of the Klipfontein Concentrator, adjacent to the road to TEMSO.

The tar dams posed an environmental, health and safety risk and as a result, the tar residues were removed by an independent waste contractor to a permitted hazardous waste landfill site (Holfontein). Subsequent remediation of the underlying and surrounding contaminated soil is required. It is proposed that the contaminated soil will be remediated to a predetermined standard prior to being backfilled, shaped and grassed with indigenous self-sustaining grasses. It has been proposed that the area associated with the Bleskop Tar Dams, once remediated, may be utilised for a Heat Tolerance Test Centre, although additional stability studies will be required prior to construction. It must be noted that the facilities (tar dams) will also be decommissioned as part of the project.

Due to the hazardous classification of the tar residue in the dams, a decision was made by RPM in 2003 to recover the material from Tar Dam D at the TEMSO site. Initially, the residue was removed and transported to a cement kiln in Lichtenburg to be used as an alternative fuel reserve (AFR), as previous studies indicated that the residue had sufficient calorific value to be used as an alternate fuel after the necessary legal permits were obtained. However, as the tar was fed into the kiln, the residue solidified in the unheated transfer lines.

Due to the material handling issues, and issues associated with the transportation to Lichtenburg, the project was unsuccessful. As a result, the tar residue and contaminated undercut was removed and transported for disposal at Holfontein's H:H hazardous landfill site.

A number of specialist studies were undertaken for the tar dams including: surface and groundwater monitoring, air quality monitoring, soil sampling and a toxicological investigation. Following the findings of the specialist studies, it was indicated that the tar dams may be impacting on the surrounding and downstream environment. During the third quarter of 2011, RPM decided to remove the remaining residues from Tar Dams A, B and C in order to reduce the risks associated with the tar dams, as detailed in Section 28 of the NEMA (Duty of Care). The removal prevented potential pollution from continuing within the area, and was deemed to be a 'reasonable measure' in accordance with the Duty of Care Principles. The tar residues were removed and transported for disposal at Holfontein by a registered waste contractor. A remediation strategy will be developed by WSP in order to remediate the contaminated soil to an acceptable standard prior to the area being backfilled, shaped and grassed.

The findings of the specialist studies will be included in the BA report, with specific recommendations incorporated into the environmental management programme (EMP) report. The draft reports will be available for public and commenting authority review for a period of 60 days prior to being finalised and submitted to the DEA for authorisation.

The BA process involves the following:

- Compilation and submission of an integrated waste management license and BA application form for the DEA;
- Comprehensive and transparent stakeholder engagement process;
- Compilation of a BA report; and
- Development of an EMP report.

What does the stakeholder engagement process consist of?

Notification of Project

The first step is to notify the public through the following mediums:

- Newspaper advertisement:
 - The Rustenburg Herald – 23 February 2012.
- Site notices;
- Written notification letters to surrounding landowners and municipal ward councillors; and
- Distribution of the background information document (BID) to surrounding landowners and registered stakeholders.

Basic Assessment Report Review

A Public Meeting will be held on 16 March 2012 at the RPM Sports Club, to which all registered and any other stakeholders are invited. All comments will be recorded so that they can be addressed in an issues trail and response report, which will be included in the final BA report that will be submitted to the DEA.

PUBLIC MEETING

All stakeholders are invited to attend a Public Meeting:

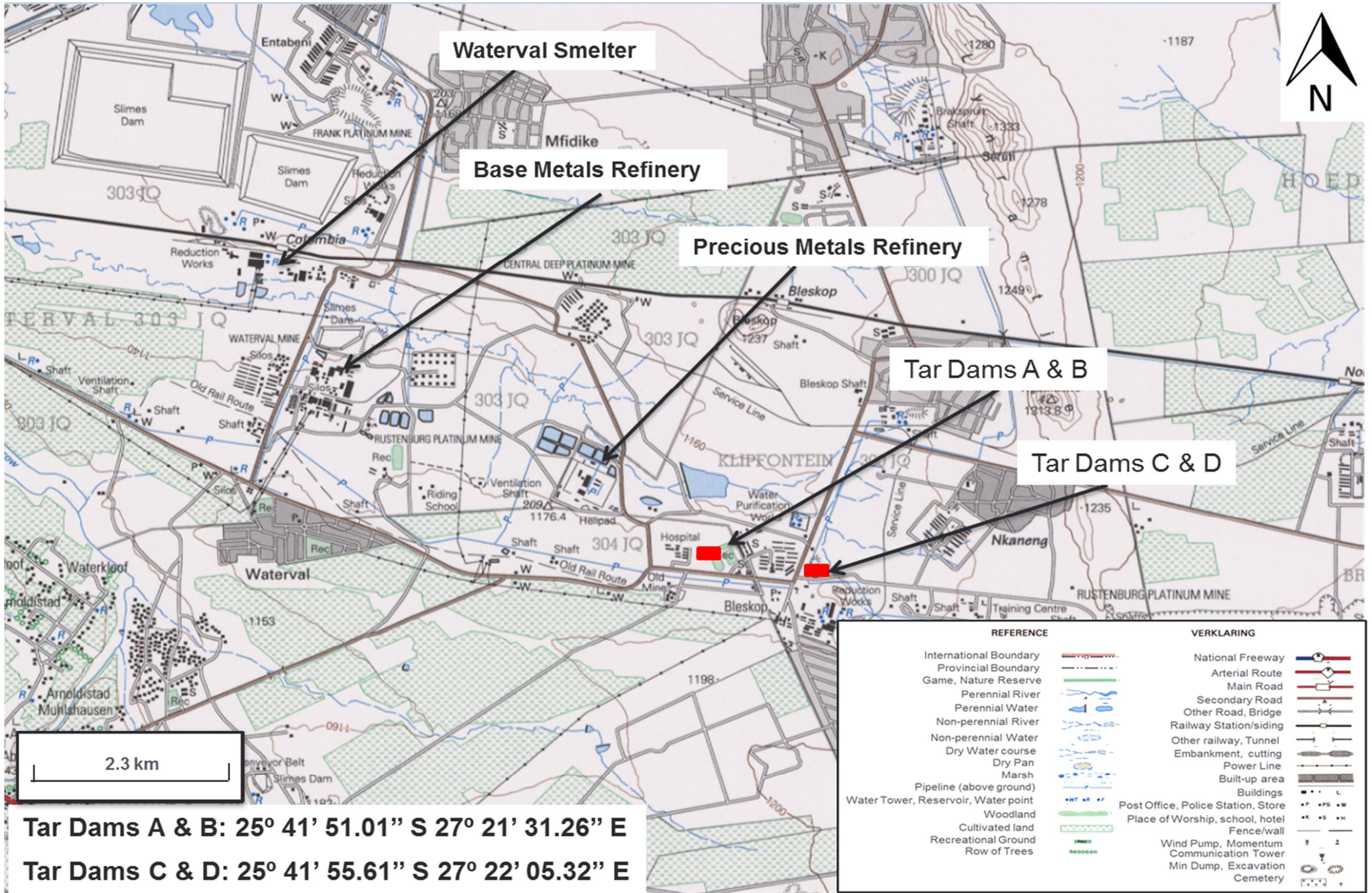
Date: 16 March 2012
Time: 16h00 – 17h00
Venue: RPM Sports and Recreation Club

Who is a stakeholder?

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

Register your interest by completing the Registration and Comments Sheet attached to this document and send it to WSP.

Locality Map



Waterval Smelter

Base Metals Refinery

Precious Metals Refinery

Tar Dams A & B

Tar Dams C & D

2.3 km

Tar Dams A & B: 25° 41' 51.01" S 27° 21' 31.26" E

Tar Dams C & D: 25° 41' 55.61" S 27° 22' 05.32" E

REFERENCE	VERKLARING
International Boundary	National Freeway
Provincial Boundary	Arterial Route
Game, Nature Reserve	Main Road
Perennial River	Secondary Road
Perennial Water	Other Road, Bridge
Non-perennial River	Railway Station/siding
Non-perennial Water	Other railway, Tunnel
Dry Water course	Embankment, cutting
Dry Pan	Power Line
Marsh	Built-up area
Pipeline (above ground)	Buildings
Water Tower, Reservoir, Water point	Post Office, Police Station, Store
Woodland	Place of Worship, school, hotel
Cultivated land	Fence/wall
Recreational Ground	Wind Pump, Momentum
Row of Trees	Communication Tower
	Min Dump, Excavation
	Cemetery

Registration and Comments Sheet

To be a registered stakeholder and ensure all comments and queries regarding this project are accurately documented and addressed please forward your comments and contact details with the attached response sheet to:

Jared O'Brien

WSP Environmental (Pty) Ltd
Address: P.O. Box 5384, Rivonia, 2128
Tel: (011) 361 1396
Fax: (086) 505 3939
Email: Jared.O'Brien@wWSPgroup.co.za

Please insert your personal details below:

Name:	
Organisation & Designation:	
Address:	
Tel:	
Fax:	
E-mail:	

Please list your interest in the project and comments below:

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