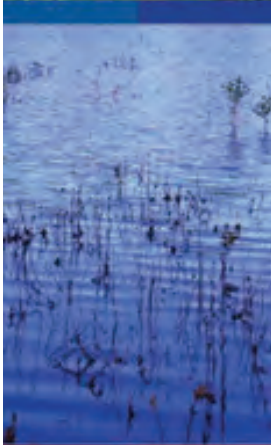


WHO IS PLATREEF RESOURCES?

WHAT IS PLATINUM MINING?



ENGAGEMENT POSTER COLLECTION OF THE DRAFT ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT FOR THE PROPOSED PLATREEF UNDERGROUND MINE NEAR MOKOPANE, LIMPOPO PROVINCE

NEMA ref No: 12/1/9/2-W32;

LIM/EIA/0000538/2013,

NEMWA ref no: 12/9/11/L1224/5,

MPRDA ref no: LP30/5/1/2/2/10067MR

Project Number:

PLA1677

Prepared for:

Platreef Resources (Pty) Ltd (Platreef)

For any project related information, contact:

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Directors: A Sing*, AR Wilke, LF Koeslag, PD Tanner (British)*, AJ Reynolds (Chairman) (British)*, J Leaver*, GE Trusler (C.E.O)
*Non-Executive

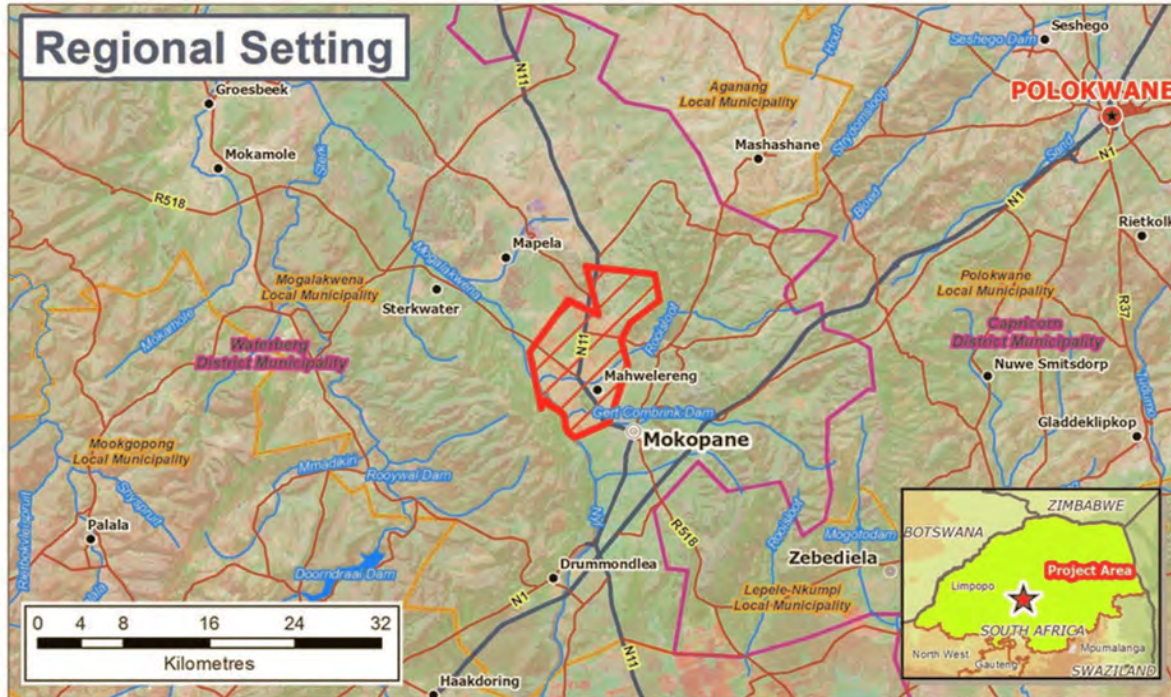
WHO IS PLATREEF RESOURCES?



- Platreef holds the prospecting rights for all minerals on the Turfspruit and Macalakaskop Farms.
- Platreef has applied for a Mining Right to develop a Platinum Mine.
- The Platreef Project is 90%-owned by Ivanhoe Mines (previously called Ivanplats) and 10%-owned by a Japanese group of companies made up of Itochu Corporation; Japan Oil, Gas and Metals National Corporation (JOGMEC) and Japan Gasoline Company (JGC).
- Should the Mining Right be awarded, this ownership will change so that:
 - Ivanhoe will own 64% of Platreef,
 - B-BBEE ownership will be 26% and,
 - The Japanese partnership will own 10%.
- A Platinum reef has been found and a Mining Right has been applied for on 6th June 2013.
- It has been proposed to develop this reef into an underground mine known as the Platreef Project.
- Platreef has been prospecting for 15 years and has an ongoing drilling programme.



WHERE IS THE PLATREEF PROJECT?



THE PLATINUM MINING PROCESS

STAGE	DESCRIPTION
Prospecting	Geologists drill holes to find out if there are minerals underground
Specialist Studies and Planning	Studies are undertaken to find out if it will be economical to build a mine
Mining Right Application	Permission is asked of authorities to mine the minerals
Financing	Investors are asked to invest their money in the development of the mine
Construction	The mine infrastructure is built
Mining Production	The rocks containing minerals are taken out from underground
Processing	The minerals are taken out of the rocks and processed into a finished product
Marketing	The finished product is sold to different industries

Platreef is at this stage

A mine starts making money at this stage

HOW DOES PLATINUM MINING WORK (1)?

The Resource and Mining



The process starts with finding a mineral to be mined. In this case platinum.

During this phase, exploration holes are drilled deep into the earth (800-1000m) to collect samples of the rock type beneath. This is called prospecting which requires a Prospecting Right from the Department of Mineral Resources.

The rock containing the minerals is called "ore" and rock that does not contain minerals is called "waste".

The ore is sent to a laboratory to find out what the quality of the minerals is.

A decision is then taken whether there is sufficient ore grade and tonnes to develop a profitable mine.



After the prospecting phase has been completed and it has been found that there is enough ore to build an economical underground mine, the development of the mine and related above-ground infrastructure can start.

There are technical, economic and legal factors that need to be considered before the development of the underground mine can start. For example, doing an Environmental and Social Impact Assessment (ESIA) to identify the possible impacts the underground mine will have on people and the environment.

The Platreef mine will be an underground, mechanised mine and NOT AN OPEN PIT MINE like the neighboring mines because the ore body is between 800-1000m below the ground.

In a large scale mechanised, underground mine, the ore is taken out by machines.

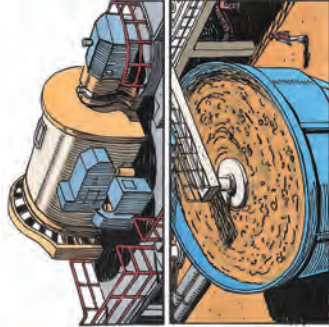
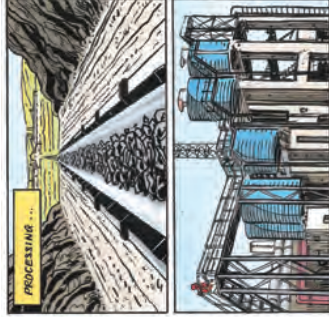
These machines are operated by highly trained and skilled people who manage the machines in underground passages.

The ore will be crushed underground and then lifted to the surface by means of a shaft, especially built for this purpose.

Once the ore reaches the surface, it is ready for the processing phase.

HOW DOES PLATINUM MINING WORK (2)?

Processing and Marketing



Waste rock is also removed from underground and hoisted to the surface through the shaft. This waste rock is transported to a separate place for storage.

Once the ore has reached surface it gets crushed for a second time into a smaller size.

The purpose of crushing is to make sure that ore is small enough for the next part of the process.

After the crushing phase, the ore gets milled into a fine powder.

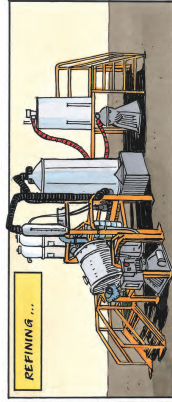
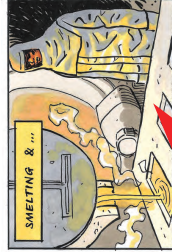
This powder is mixed with water and special chemicals and then passed through a liquid to form a froth.

Tiny pieces of platinum float to the top and are taken out as a soapy froth called "concentrate".

The concentrate is then dried and loaded onto a truck.

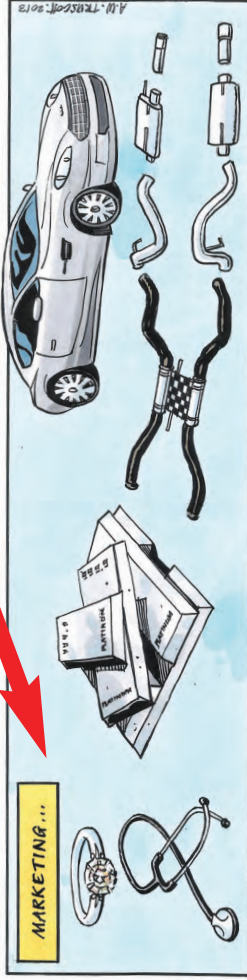
The truck takes the concentrate to a smelter and refinery for further processing.

Platref does not plan to build its own smelter or refinery at this stage.



After the refining process, the platinum is sold to different industries for uses such as:

- ★ Jewelry
- ★ Platinum in medicine
- ★ Cars
- ★ Electronics
- ★ Glass production
- ★ Chemicals
- ★ Platinum as an investment



Public Participation during the Platreef ESIA



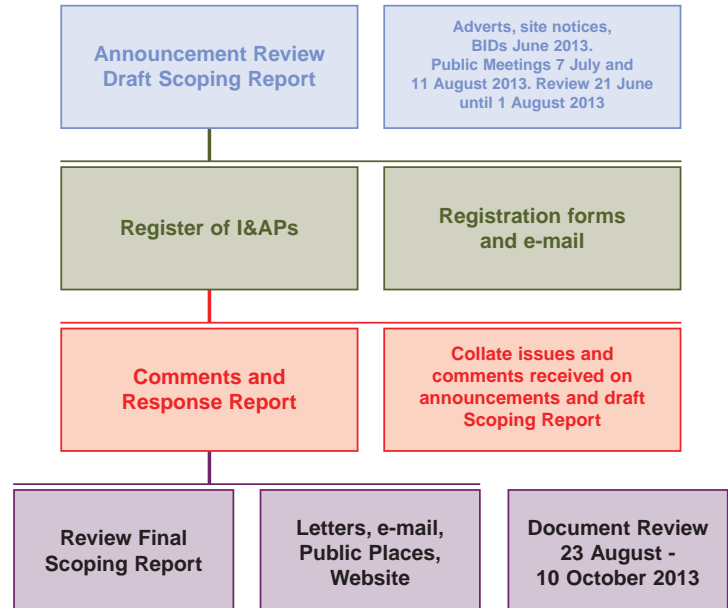
What is Public Participation?

As part of any Environmental Impact Assessment (EIA) Public participation is a process leading to better decisions;

The public participation process for the Platreef project aims to achieve the following objectives:

- Identify and register all people who are Interested and/or Affected Parties (I&APs);
- Distribute project information to all I&APs;
- Ensure that I&APs have the opportunity to raise issues of concern; and Record and address these issues and comments.

Public Participation during Scoping



The Platreef ESIA Process



PROPOSED MINE PLAN (1)

Examples of Mine Surface Infrastructure

Conveyor Belt



Waste Rock Dump



Ore Stockpile



Concentrator Plant

PROPOSED MINE PLAN (2)

Examples of Underground Mining Machinery



Drilling
Machine



Underground
Workshop

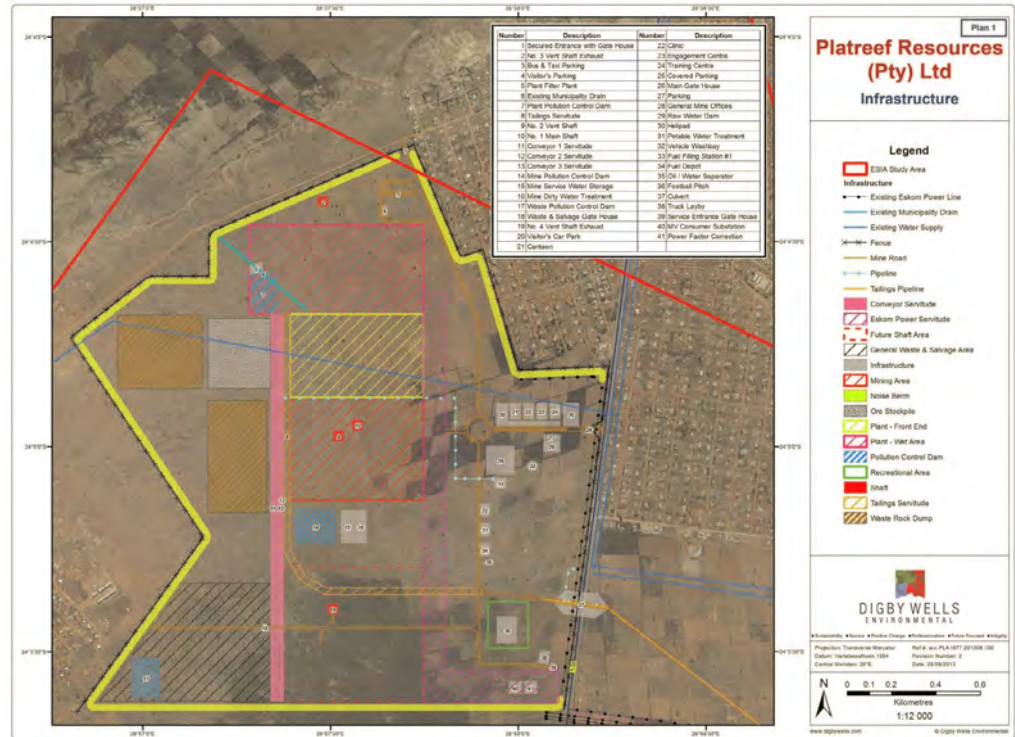


Load-Haul-
Dump
Machine
(LHD)



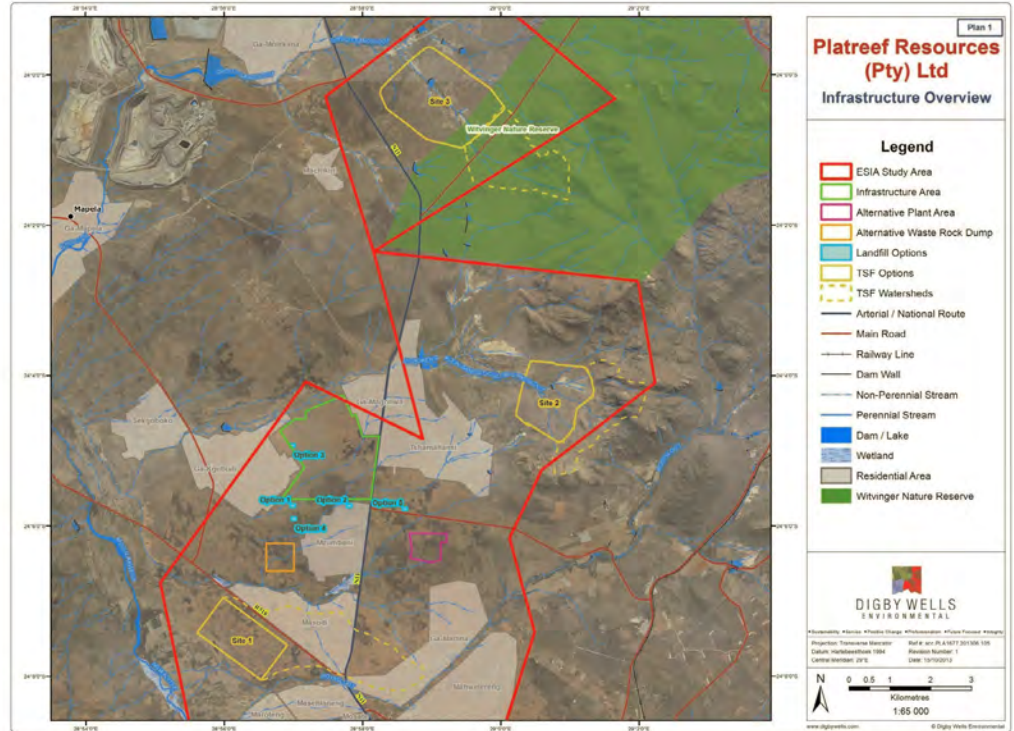
PROPOSED MINE PLAN (3)

Proposed Infrastructure Layout



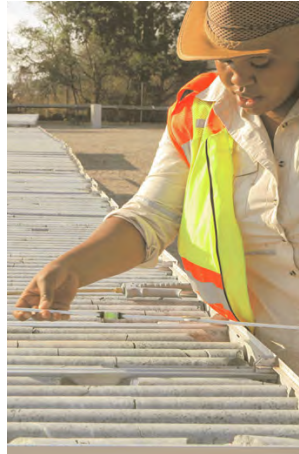
PROPOSED MINE PLAN (4)

Proposed Infrastructure Alternatives



BENEFITS OF THE PROPOSED MINE PLAN (1)

Employment



- Platreef will employ ± 2500 people during construction of the mine
- Platreef will employ ± 2000 direct people when the mine is at full production
- There will also be a large number of other, indirect work opportunities
- Platreef is already investing in the development of small businesses in Mokopane and skills development of employees and community members

BENEFITS OF THE PROPOSED MINE PLAN (2)

Local Economic Development



Lesedi Care Centre



Thobela Care Centre



Motshitshi Primary School



Uitloop Farm

Enterprise Development



Mushi Motors



Limburg Agricultural Project

Skills Development



Skills and Ability Audit

Legal Requirements of the ESIA Process



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

- National Environmental Management Act (Act No. 107 of 1998)
- National Environmental Management Waste Act (Act No. 107 of 1998) (NEM:WA)



water affairs

Department:
Water Affairs
REPUBLIC OF SOUTH AFRICA

- Integrated Water Use License (IWUL) as per National Water Act (Act No 36 of 1998) (NWA)



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

- Mineral and Petroleum Resources Development Act (Act No. 28 of 2002) (MPRDA)
- Mining Right



LIMPOPO

PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
ECONOMIC DEVELOPMENT, ENVIRONMENT & TOURISM

- Limpopo Department of Economic Development, Tourism and Environmental Affairs (LEDET)

Specialist Studies During the ESIA Process

Specialist Environmental Studies



Aquatics and Wetlands



Heritage



Air quality



Soil and Land Capability



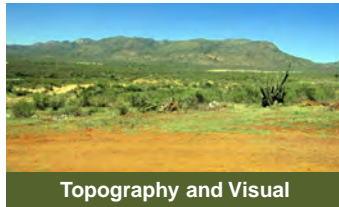
Groundwater



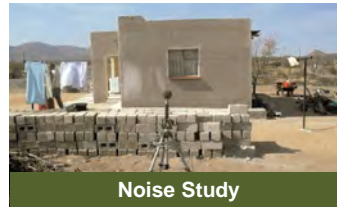
Surface water



Plants and Animals

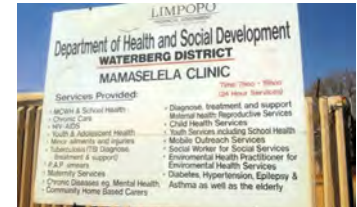


Topography and Visual



Noise Study

Specialist Health Studies



Community Health Impact Assessment

Specialist Social Studies



Social Impact Assessment

IMPACT ASSESSMENT METHODOLOGY



Mining Related Activity

Identify and determine Impacts

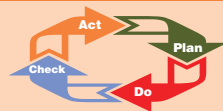
Impacts identified during the construction, operation and closure of the proposed mine and associated infrastructure



Do impacts have a positive or negative effect on nature and communities?

IMPACT ASSESSMENT

How will impacts identified change/affect the nature and communities (Significance rating)



Impacts identified will be managed in the environmental management plan, to reduce or eliminate the effect they will have on nature and the communities

IMPACT ASSESSMENT FINDINGS - ENVIRONMENT

Noise



Loud noise from blasting, vehicles, machinery and production plant

IMPACT ASSESSMENT

Vehicles, machinery and the production plant will create noise



Vehicles and machinery to be serviced regularly. Machinery to be switched off when not in use (day/night)

Air Quality



Crushing of ore and transport on the dirt roads

IMPACT ASSESSMENT

The crushing and transportation of materials and equipment releases dust



Dust suppression must occur in the mining site and in areas where lots of dust might be made

Soil



Soil compaction and topsoil loss due to erosion

IMPACT ASSESSMENT

The mine operational phases in the Project area could lead to compaction of soils and soil erosion



Only remove topsoil when and where necessary and if removed stored properly in soil stockpiles

Surface Water



Rain water running off the mining area

IMPACT ASSESSMENT

More water will run off the mining areas because there will be more areas under concrete and this water could possibly be dirty



Cut off trenches and drains to be built around any waste rock dumps, and stockpiles of overburden and topsoil

Plants & Animals



Plants and animals will be removed or chased away

IMPACT ASSESSMENT

The building and operation of the mine will remove plants and animals



Plants should only be removed when and where necessary. Sensitive areas such as wetlands should be avoided

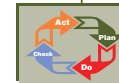
Visual Impact on Landscape



Building of surface infrastructure will change the visual environment

IMPACT ASSESSMENT

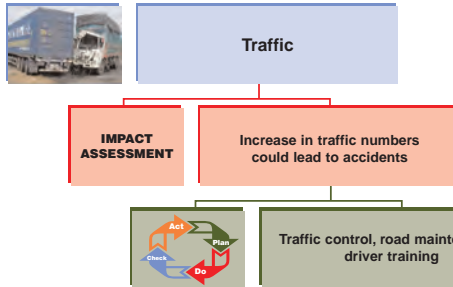
The building of the mine's surface infrastructure will have negative visual impact on the environment



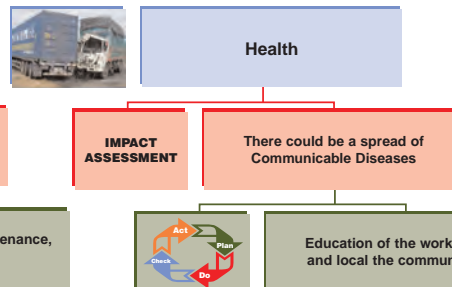
Where possible infrastructure such as stockpiles should be covered with plants and infrastructure placed to lessen the visual disturbance

IMPACT ASSESSMENT FINDINGS - HEALTH AND SAFETY / SOCIAL

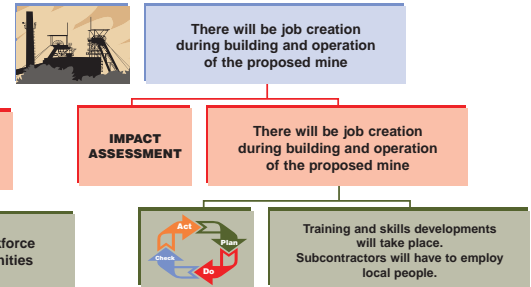
Safety



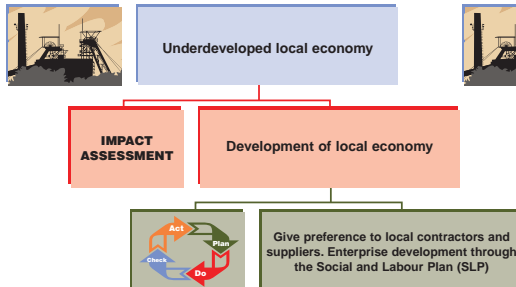
Health



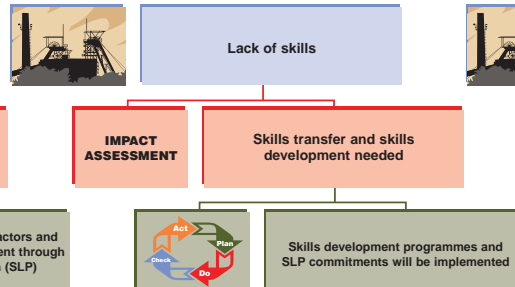
Social



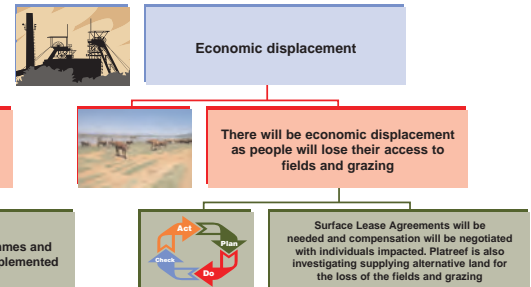
Social



Social



Social



ENVIRONMENTAL KEY ISSUES

- The key issues in the table below are not all the issues and comments that were received from Stakeholders.
- For a complete record of all the issues raised please look at the comments and response report which is part of the Draft EIA documents.

Issue	Response
Will there be compensation for fields?	Compensation is being paid for fields. The amount of compensation was determined by the Department of Agriculture.
Will blasting activities affect nearby houses?	A baseline housing survey will be undertaken. Blasting will occur according to legal requirements.
The location of the supporting infrastructure must be explained, this includes the location of workshops, offices, and tailings dam.	The specialist studies undertaken for the ESIA have assisted to determine where the rock dump and other infrastructure will be situated. This information is included in the ESIA reports which are public documents.
Only affected parties must be invited to the meeting and not interested parties.	Meetings are open to the public.
What will the strategy be to ensure minimal impacts on the river systems in the area – avoid water pollution?	A detailed surface water study will be undertaken. Recommendations will be made in the EMP to manage the potential for water pollution. A monitoring program will also be implemented.
What will happen to graves found in the project area?	Digby Wells is working hand-in-hand with the South African Heritage Resources Agency (SAHRA). All grave sites will be identified and marked and feedback given to SAHRA. The authorities will be consulted to request permission to relocate the graves. Once this is done, the affected families will be consulted.
We are concerned about the negative impact dust might have on the community.	A dust impact assessment forms part of the EIA and will include mitigation measures to address the impacts of dust.
What will happen to my underground water supply?	There should be no impact on ground water. A ground water investigation is being undertaken to determine the impacts.
Is there an alternative land available for farmers?	Platreef is investigating a number of options to compensate people for the loss of farming land; this includes providing alternative land.
The leadership of the community should be consulted before consulting with the community	The traditional leadership of the communities were engaged prior to the public meetings.
Will there be resettlement?	There is no resettlement planned for any of the villages.

PLATREEF PROJECT KEY ISSUES

Issue	Response
<p>Will the mine employ uneducated / unskilled people?</p>	<p>The mine will employ mostly people with a minimum of a grade 12 education. There will however be some unskilled jobs.</p>
<p>Platreef is not honest with Communities?</p>	<p>Platreef has been open and honest with the communities. More than 50 consultation meetings have been held with the communities to inform them of the activities undertaken by Platreef. More meetings will be held in the future to keep the community informed.</p>
<p>What actions have been taken for the granting of the lifting of the section 93?</p>	<p>The actions as indicated by the DMR directive were undertaken and hence the lifting of the section 93.</p>
<p>We even have lawyers, but they are not provided with the required information.</p>	<p>Platreef will provide non-commercial information requested.</p>
<p>The mine's drilling machines are still operating in the area but there are no surface agreements.</p>	<p>The drilling is part of the prospecting right. Surface agreements are a process which is overseen by the Department of Rural Development and Land Reform. This process will soon be started with the affected communities.</p>
<p>Platreef continues to indicate that they are spending money in the community but there is no evidence of this.</p>	<p>Platreef is already supporting several local economic development projects and enterprise development projects. Once the mining right is awarded the projects described in the Social Labour Plan will be fully implemented.</p>
<p>Platreef and Digby Wells has only identified eight villages which will be affected but all 17 villages of the Mokopane Traditional Council are affected.</p>	<p>The eight villages identified are the most directly affected villages as they will experience the majority of the negative impacts. This does not mean the other villages are excluded.</p>
<p>All people from all the affected villages must have an opportunity to work.</p>	<p>People from the affected villages will be given preference to work on the mine.</p>
<p>Platreef is creating divisions by meeting with Tshamahansi separately.</p>	<p>A separate meeting with Tshamahansi was arranged at the request of the Tshamahansi leadership. The meeting was also held separately as the people of Tshamahansi speak Xitsonga.</p>
<p>If the Broad-Based Black Economic Empowerment (B-BBEE) issue is not addressed, a small number of people will benefit a great deal while many gain absolutely nothing.</p>	<p>The Government recently revised the B-BBEE codes and Platreef is reviewing the effect of the amendments on the Platreef B-BBEE before consulting the communities regarding this issue.</p>
<p>Platreef is currently drilling and some people in the area are not able to use the water which is already polluted with chemicals from the drilling activities. How is the water going to be managed whilst the communities are already impacted upon?</p>	<p>The family which was impacted has been supplied with an alternative water source. The specialist water quality study will indicate how the impacts of the mine on the water can be minimized.</p>

Public comment on the Draft Environmental Impact Assessment Report (DEIAR)

The complete Draft Environmental Impact Assessment Report and the supporting studies are available for you to read from **4 November until 25 November 2013 for the MPRDA process and from 4 November until 14 December 2013 for the NEMA/NEM:WA processes**. The reports are available at the following places.

Documents		
Name	Location	Contact
Rifilwe Madisa	Mogalakwena Public Library, corner Van Riebeeck and Pretorius Streets	015 491 9729
Lucy Mashetisho	Mahwelereng Public Library, Mahwelereng Village	078 628 3326
Daphney Tsatsi	Platreef CSR office, 68 Retief Street, Mokopane	015 491 5694
Electronic Copies		
Steve Horak	www.digbywells.com (under resources public documents)	011 789 9495
Steve Horak	Phone and request a CD copy	011 789 9495
The reports are also available from the headmen of the eight directly affected villages		
Madiba; Ga - Magongoa; Masehlaneng; Masodi; Mzombane; Sekgobokwe; Tshamahansi (3 headmen); and Ga - Kgubudi.		
The reports are also available at the Platreef CLO offices in the following villages		
Madiba; Masehlaneng; Mzombane; and Ga - Kgubudi.		

How to Comment

You can make your comments by:

- Completing a comment sheet at one of the public meetings (see table below);
- Writing a letter or sending an email, or fax to the (contact details below); and
- You can also attend any one of the public meetings (see below) where the reports will be presented.

Date	Location	Time	Language
Sunday 17 November 2013	Mmadikana sport ground next to the Mokopane Traditional Council	09:00 – 11:00	English / Sepedi
Sunday 17 November 2013	Tshamahansi Open Ground, SAASA Pay Point Area, behind Roois Church, Ga Matjeke	09:00 – 11:00	English / Tsonga
Wednesday 20 November 2013	Oasis Lodge, 1 Thabo Mbeki Drive, Mokopane	14:00 – 16:00	English / Sepedi / Afrikaans

Your comments on the reports are important and your comments, and responses to them, will be included in the next report which will be sent to the government to help them make a decision regarding the mine.

Comments can be sent to:

Digby Wells Environmental

Steve Horak (steve.horak@digbywells.com) or

Lerato Ratsoenyane (lerato.ratsoenyane@digbywells.com)

Tel: 011 789 9495

Fax: 011 789 9498

Web site: www.digbywells.com

Project Number PLA1677