

# EIA PROCESS AND WATER USE LICENSE APPLICATION FOR ALLUVIAL DIAMOND PROSPECTING RIGHT APPLICATIONS WITH BULK SAMPLING BY SAMARA MINING (PTY) LTD ON THE LEFT BANK OF THE ORANGE RIVER, RICHTERSVELD, NORTHERN CAPE PROVINCE, SOUTH AFRICA

#### DMRE REF. NCS 30/5/1/1/2/12664 PR, 12663 PR

#### 1st ROUND OF PUBLIC ENGAGEMENTS: SCOPING PHASE

#### **KEY AUTHORITIES MEETING**

Meeting called by Naledzi Environmental Consultants (Pty) Ltd

Facilitator and Notetaker: Marissa Botha

Date: 14 December 2020

**Time:** 10:00

Location: Zoom Meeting (Meeting ID: 829 1756 7980 Passcode: 149 587)

Participants: Please refer to Annexure A for the Zoom Meeting Participants List

Name & Surname	Position	Abbreviation		
Naledzi Environment	Naledzi Environmental Consultants (NEC)			
Marissa Botha	EAP and Public Participation Programme	MB		
Specialists				
Robert Crosby	Ages (Pty) Ltd, Geohydrologist, Hydrological and Hydrogeological Impact Assessment Study and Water use License Application	RC		
Stephen van Staden	SASS Environmental Services CC, Terrestrial Biodiversity, Aquatic Ecology, Visual Impact Assessment Studies	SvS		
Tina van der Merwe	'To the T Drafts' GIS Mapping Specialist	TVDM		
Samara Mining (Pty)	Ltd (Samara)			
Dr Anthony Dywili	Director	AD		
Dap Du Preez	Director	DDP		
NDI Geological and O	Consulting Services (Pty) Ltd (NDI)			
Ndi Mofokeng	Geologist and Project Manager	NM		
Bridget Tshioma	Geologist	BT		
Authorities				
Peter Cloete	Northern Cape Department of Environmental Affairs and Nature Conservation: Springbok, Scientific Services, Namakwa District (DENC)			
Willem Louw	South African National Parks: Senior Manager – Park WL Planning and Development (SANPARKS)			
Brent Whittington	Richtersveld National Park, Park Manager (SANPARKS)	BW		
Natasha Higgit	South African Heritage Resources Agency (SAHRA) NH			

Dr David Morris	McGregor Museum Kimberley, Archaeology	DM	
Dr Wietche Roets	National Department of Water and Sanitation,	WR	
	Specialist Scientist – Directorate: Water abstraction and		
	In-stream use (DWS)		
Willeen Olivier	National Department of Environment, Forestry and WO		
	Fisheries, Biodiversity Officer Control: Transfrontier		
	Conservation Areas (DEFF: TFCA)		
Thivhulawi	National Department of Environment, Forestry and	TN	
Nethononda	Fisheries, Protected Areas Planning (DEFF)		
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#### **Regrets**

- Alexia Hlengani, DWS: Orange Proto, Upington (emergency at the office)
- Pieter Ackerman, DWS: In-stream use (on leave)
- Ronald Mulaudzi, DWS: In-stream use (another meeting)
- Kallie Naude, DEFF: Protected Areas (on leave)

#### 1. AGENDA ITEMS

No	Item	Presenter
1.1	Welcome and Introductions	NEC
1.2	Application Summary (Legislative Requirements, Details and	NEC
	Location)	
1.3	Project Background, Prospecting Method and Designs	Samara
1.4	EIA and Public Participation Process	NEC
1.5	Potential Impacts, Legal Implications and required specialist	NEC
	investigations	
1.6	Water Use License Application	NEC
1.7	Overview of Samara Mining (Pty) Social Development Plan	Samara
1.8	Discussion session	All
1.9	Way Forward, Closure	NEC

The full PowerPoint presentation is attached as Annexure B.

#### 2. KEY ISSUES

- PRAA 2 and the northern portion of PRAA 1 is located in a protected area in terms of Section 48 and 9 (b) of NEMPAA and mining or prospecting herein is prohibited. It is recommended that PRAA 2 and the northern portion of PRAA 1 be excluded from authorisation and EIA Process. (DEFF, SANPARKS)
- DMRE should not have accepted an application within a protected area, it is illegal.
- DWS will not entertain a Section 21c & i water use application inside the Orange River, inside a protected area. The fatal flaws identified in the Scoping Reports will prejudice the applications. The application areas are no-go areas and the applications should not proceed any further.
- The international border between South Africa and Namibia is a highly contentious issue. The prospecting activities might create an international incident if it goes beyond the international border. The borderline needs to be confirmed.

- The application areas/land is held in trust by the Minister of Land and Rural Development and is being handed over to the informal land rights holders' namely the communities of Sanddrift, Kuboes, Lekkersing and Eksteenfontein in terms of the Interim Protection of Informal Land Rights Act (Act 31 of 1996) (IPILRA). Samara needs prior consent from the communities to prospect on the land. The engagement process as specified under IPILRA needs to be followed.
- SAHRA can only comment on the national heritage resources and matters and cannot comment on issues such as outstanding universal value.

#### 3. ACTION ITEMS

Action Item	Assigned	Completed
The international border between South Africa and	Marissa Botha,	DIRCO will be engaged in
Namibia must be confirmed through engagement with	NEC	January 2021.
DIRCO.		
Conduct a fluvial geomorphological assessment to	Marissa Botha,	The Geomorphic
ensure the river mouth dynamics are not affected by the	NEC and	Assessment will be
upstream mining. (DWS)	SASS	included in the Freshwater
	Environmental	Ecological Assessment to
	Services CC	describe the affected
		sections of the Orange
		River in terms of
		geomorphic reaches,
		physical habitat types and
		sediment regime.
A permit must be obtained from DEFF: Forestry	Samara	DEFF will be engaged
Management for the impact on the riverine forest and		during the EIA Phase in
removal thereof. (DEFF: TFCA)		this regard.
The communities of Sanddrift, Lekkersing, Kuboes and	Marissa Botha,	NEC will engage the
Eksteenfontein need to be engaged as the landowners of	NEC	communities in terms of the
the application areas. A consultation process must be	Samara	NEMA EIA Process PPP.
followed in terms of IPILRA.		It will be the responsibility
		of the Samara to follow a
		consultation process in
		terms of IPILRA to obtain
		landowner consent for
		prospecting on the
NEC word areas ODACECOM as used of the EIA	Maniana Dadha	Richtersveld CPA land.
NEC must engage ORASECOM as part of the EIA Process and WULA PPP.	Marissa Botha, NEC	EIA Process and meeting notifications have been sent
Process and WULA PPP.	NEC	to ORASECOM and will
		be formally engaged during
		January 2021.
The Heritage Impact Report/s must separate the	Appointed	The South African
National and World Heritage issues in the reports and	Appointed Archaeologist	Commission for UNESCO
UNESCO must be engaged regarding the outstanding	Marissa Botha,	is included on the I&AP
universal value of the world heritage site.	NEC	Database and has received
different value of the world heritage site.	INLC	the EIA Process
		notifications and meeting
		invites. UNESCO will be
		formally engaged during
		January 2021.
		Junium y 2021.

#### 4. MEETING MINUTES

No	Agenda Item		
1.1	Welcome and introductions Presenter Marissa Botha, NEC		
1.1.1	Welcome and introductions by Samara, NDI, NEC, Specialists and Authorities.		
1.1.2	The agenda and purpose of the meeting were confirmed. The overview of the Samara's		
	Social Development Plan was added to the agenda.		
1.1.3	The project team role and responsibilities were explained:		
	Samara has applied to the Department of Mineral Resources and Energy		
	(DMRE) for two alluvial diamond prospecting right applications on the left		
	bank of the Orange River close to Sendelingsdrift in the Richtersveld within the		
	Namakwa District of the Northern Cape Province of South Africa.		
	• NDI has been appointed as the consulting geologist and project manager for the applications.		
	<ul> <li>NEC is the independent environmental assessment practitioner (EAP) appointed</li> </ul>		
	to conduct the statutory EIA and Public Participation Process (PPP) for the		
	applications. This meeting forms part of the EIA Process PPP.		
1.1.4	The specialist and their role in the EIA Process were presented.		
	• Robert Crosby from Ages (Pty) Ltd is the appointed Geohydrologist and		
	responsible for the Water Use License Application (WULA), Hydrological and		
	Hydrogeological Impact Studies;		
	• Stephen van Staden from SASS is the appointed specialist to investigate and		
	report on aquatic ecology, fish migration, terrestrial biodiversity and visual		
	aspects of the application areas.		
1.2	Application Legislative Requirements, Presenter Marissa Botha, NEC		
1.0.1	Location and Details		
1.2.1	The legislative requirements of the applications were specified.		
	A prospecting with bulk sampling requires a prospecting right application in terms of		
	section 16 and 20 of the Mineral and Petroleum Resources Development Act (Act 28 of 2002) (MPRDA). Application is required to the DMRE.		
	Prospecting with bulk sampling are also regulated activities under the National		
	Environmental Management Act (Act 107 of 1998) (NEMA) EIA Regulations of 2014		
	(GNR 326) and its associated listing notices GNR 327 (Activity 20) and GNR 325		
	(Activity 19) and require environmental authorisation. The application for		
	environmental authorisation must be submitted concurrently to the application for		
	prospecting rights to the DMRE.		
	On 22 July 2020, NDI submitted Samara's two applications for alluvial diamond		
	prospecting rights and environmental authorisation to the DMRE: Springbok. The		
	applications were accepted on 15 September 2020 on the following prospecting right		
	application areas (PRAA):		
	○ PRAA 1 – NCS 30/5/1/1/2/12664PR situated on the left bank of the Orange River boundary to Portion of Remainder of Farm Richtersveld No. 11 and is		
	987 Hectares in extent;		
	PRAA 2 – NCS 30/5/1/1/2/12663 PR situated on the left bank of the Orange River		
	boundary to a Portion of the Remainder of Farm No. 18 and is 690 Hectares in extent.		
	The applications are subject to a full EIA Process and PPP to be conducted by an		
	independent consulting company (NEC).		
1.2.2	The general purpose and phases of the EIA Process were explained.		
	The EIA Process comprises two phases i.e. Scoping and EIA Phase.		
	The Scoping Phase identifies the main issues and impacts that need to be considered		
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and addressed in the EIA Phase, through a consultative process and determines which specialists studies are required to evaluate the significance of such impacts. The findings are presented in a Scoping Report. The Scoping Report is subjected to a 30 days public review period thereafter is submitted to the DMRE for acceptance.

Acceptance of the Scoping Report signifies the start of the EIA Phase. The EIA Phase assesses the significance of the potential impacts through in-depth specialist field investigations. The findings of the assessment are presented in an Environmental Impact Report (EIR) and include an Environmental Management Programme (EMPR) which recommends how to operate and implement the activity. The EIR and EMPr reports are subjected to a 30 days public review and comment period thereafter is submitted to the DMRE for decision making on the application.

### 1.2.5 Maps were presented to illustrate the location of the application areas relevant to the EIA Process.

Samara proposes to prospect on the left bank, below the flood line of the Orange River near Sendelingsdrift, on the border between South Africa and Namibia, approximately 30km north of Alexander Bay.

The high-water level on the northern bank of the Orange River demarcates the South African border based on the 1890 treaty between Britain and Germany. According to the EAP's knowledge, the application areas fall within Wards 1 and 2 of the Richtersveld Local Municipality within the Namakwa District of the Northern Cape Province of South Africa.

PRAA 1 is approximately 250m west of Sanddrift and is situated within 10km of the Richtersveld National Park and Richtersveld Botanical and Cultural Landscape World Heritage Site.

PRAA 2 is approximately 10km northeast of Sendelingsdrift within the protected area of the Richtersveld National Park and Richtersveld Cultural and Botanical Landscape World Heritage Site.

# 1.2.6 Satellite maps and an orthophoto were presented to illustrate the location of the proposed prospecting focus areas and position of a prospecting pocket within the regulated zone of the Orange River.

Bulk sampling will focus on several prospecting pockets along the Orange River within the greater PRAAs. The pockets are located near existing diamond mining operations of the Lower Orange River Diamonds (Pty) Ltd and Oena Diamond mine.

#### 1.2.7 The details of the application were described.

Prospecting and bulk sampling will be conducted in line with a prospecting works programme (PWP) over a five (5) year period and will comprise three phases, i.e.:

- o Phase 1 Non-invasive prospecting activities limited to desktop studies
- Phase 2 Invasive bulk sampling to be conducted over a three (3) year period followed by final rehabilitation.
- Phase 3 Preparation of Feasibly Studies to determine if mining at the application areas would be feasible.

Application has been made for environmental authorisations to be valid for eight (8) years to provide for the completion of the PWP and possible renewal of the prospecting rights for another three (3) years. If the PWP yields positive results Samara will apply for a Mining Permit to commission a 'pilot mine'.

The prospecting method will include:

- Excavation of ten (10) trenches per application area, each 100m x 25m x 4m with each sample size being 10 000m³;
- Minor temporary river diversions will be constructed to gain access to alluvial

material. A channel way will be excavated from the current river flow on the dry side of the river bed. Open bottom and top entrances will be included to allow flow through the new channel and include a cast bunt wall in the river to direct flow through the new channel.

- Load and haul samples to Rotary Pan Plant to process, screen, concentrate samples and recover alluvial diamonds. No chemicals will be used in the process;
- Water for the processing will be abstracted from the Orange River. A vacuum and filter system will remove the dirt, filter the water to drinkable standard and either release it back into the river or supply communities with water by pumping it into municipal reservoirs (open for discussion);
- Tailing and overburden will be backfilled (returned) into excavations, followed by topsoil.
- Distributed areas will be appropriately rehabilitated according to environmental guidelines.
- Associated prospecting infrastructure will include:
  - o Ablution facilities;
  - Access roads
  - o Diesel storage facilities
  - o Fences
  - o Office sites
  - o Plant sites (Rotary Plant)
  - o Contractor's camp
  - Vehicle parking areas.

The location of processing infrastructure must still be finalised based on the recommendations to be made by the specialist investigations which will follow in the EIA Phase.

# 1.3 Project Background Presenter Dap Du Preez, Dr Dywili (Samara)

#### 1.3.1 The Rotary Processing Plant Design was illustrated and discussed.

The entire plant will be operated on a skid frame for easy movement and or evacuation in case of a flood. The plant can be raised and moved within six (6) hours.

All the plant conveyor belts will have underpans to collect any oil spills or grease and will drain into a tray beyond the plant. From the tray, the runoff will be pumped into a filter system to breakdown oil and grease. The plant has been designed to have zero spillage. The filter system has been put in place to replace the need for a slimes dam. The filter system will remove the water from the processed material; clarify it to drinkable standard and either discharge it downstream of the workings or pump it to municipal reservoirs for it to be used by communities. The silt/mud removed from the process water will be collected in a bottom pan and backfilled into the excavations.

### 1.3.2 The prospecting method (item 1.2.7) was recapped and the prospecting scale was explained.

Samara will implement the prospecting activities at a small scale and in a phased manner to minimise the risk to the environment. The first prospecting pocket will be a pilot operation to refine the prospecting method.

Inputs and guidance are being sought from several key stakeholders to refine the prospecting method and concept to ensure that the project becomes a milestone and innovation of mining.

### 1.4EIA ProcessPresenterMarissa Botha (NEC)1.4.1The EIA process diagram was illustrated and the Scoping and EIA Process

#### purpose (1.2.2) was recapped and the tasks and reporting were described.

The Scoping Phase identifies the major issues and impacts that need to be considered and addressed in the EIA Phase, through a consultative process and determines which specialists studies are required to evaluate the significance of such impacts. This is presented in a Scoping Report.

The EIA Phase assesses the significance of the potential impacts through in-depth specialist field investigations. The findings of the assessment are presented in an Environmental Impact Report (EIR) and include an Environmental Management Programme (EMPR) which recommends how to operate and implement the activity. The findings are presented to the competent authority to decide on the application.

A consolidated EIA Process is being conducted for the prospecting right applications as the areas are end-to-end. Separate environmental reports are being generated according to the application areas. The EIA process is currently in the Scoping Phase.

The EIA Process timeline was presented. The specialist desktop investigations and Scoping Reports for the application areas have been prepared during October and November 2020 and are currently available for public inputs until 14 December 2020.

### 1.4.2 The list of potentially significant impacts as detailed in the Scoping Reports for the applications was indicated.

The list of potentially significant impacts included in the Scoping Reports for the applications include:

- PRAA 2 is located within a protected area (Richtersveld National Park, Richtersveld Cultural Botanical Landscape) and important fish corridor. The applicant and registered I&APs have been notified of the implication on the Draft Scoping Report availability letter;
- There are currently claims of Samara's Prospecting Right Applications overlapping the Lower Orange River Diamonds (Pty) Ltd and Oena Mine Mining Right Areas. NEC has lodged a spatial query to the DMRE in this regard and waits on their response. Samara, LOR and DMRE have also engaged in this regard on 11 December 2020; (See Annexure D for the Key Plan)
- There is also existing diamond mining operations along the Orange River including livestock farming on the banks' river. Samara will need to negotiate access or reach an agreement with existing diamond mining operations for placement of prospecting infrastructure.

The significant features of onsite and likely impacts were presented. (refer to presentation attached as Annexure B for details, slide 19-21)

#### 1.4.3 The present legal implications relevant to the application areas were highlighted.

PRAA 2 has a significant legal implication being located within the Richtersveld National Park and Richtersveld Cultural Botanical Landscape protected area. According to the National Environmental Management Protected Areas Act (Act 57 of 2003) (NEMPAA), these areas are legally protected, and mining herein is prohibited.

According to the Northern Cape Critical Biodiversity Areas (CBA) database of 2016 PRAA 1 falls within a CBA1 area, whereas PRAA 2 is located within a protected area. Protected and CBA1 areas consist of intact, undisturbed ecosystems. According to Namakwa Bioregional Plan in terms of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004), strictly no mining is allowed within these regions.

Mining and Biodiversity Guideline 2013 - PRAA 1 pockets are located in an area of

Highest Biodiversity Importance and therefore poses a high risk for mining. If the presence and significance of these biodiversity features are confirmed during the site assessment, it is deemed likely that these areas could also be considered no-go areas from a biodiversity perspective due to the high impact and potential loss of irreplaceable habitat.

### 1.4.4 The requirement for specialist field investigations was explained and required studies listed.

The list of potential impacts has been identified based on desktop investigations by the EAP and appointed specialists and are still subject to further in-depth specialist field investigations to be conducted during the EIA Phase.

Identified specialist field investigations to be conducted during the EIA Phase include:

- Terrestrial Biodiversity Impact Assessment
- Freshwater Impact Assessment
- Heritage and Palaeontological Impact Assessment
- Hydrological and Hydrogeological Impact Assessment
- Visual Impact Assessment

The specialist field investigations will allow NEC to determine the full scope of the potential impacts and to produce well-informed EIR and EMPR Reports for the application areas. The intention is to start conducting the field investigations from 6 – 12 January 2021, yet NEC and the specialists require access to prospecting right areas to conduct the investigations and consent to access areas is still being sought from existing mining operations. The prospecting focus areas are only accessible from existing mining operation gravel roads.

- The Scoping Reports will be finalised to incorporate public submissions and will be submitted to the DMRE by 11 January 2021, based on an approved 50-day extension. It is anticipated that the DMRE will either accept/reject the Final Scoping Reports for the applications by February 2021 after which specialist field investigations will follow.
- 1.4.6 Samara is undertaking a high-end environmental impact assessment process to gauge the likely environmental impacts of the project and formulate mitigations measures with the assistance of a multi-disciplined specialist team, to avoid and or manage the potentially significant impacts of the prospecting and bulk sampling activities along the Orange River. Samara intends to work in a phased manner by implementing concurrent rehabilitation to minimise potential impacts and risk of degradation of the affected focus areas.

#### 1.5 Public Participation Process (PPP) Presenter Marissa Botha (NEC)

#### 1.5.1 The PPP was described and the completed PPP activities detailed.

Two rounds of public engagement are scheduled for the EIA Process. The first round seeks to announce the EIA Process and present the Draft Scoping Reports for 30 calendar days' public review and comment. The findings of the Scoping Reports are presented at public engagements to facilitate comments on the reports.

The draft Scoping Reports are currently available for public review and comment from 13 November until 14 December 2020. Electronic copies of reports are available for download from the Naledzi website and hardcopies have been placed at the following public venues:

- Sendelingsdrift SANPARKS offices
- Sanddrift, Kuboes, Eksteenfontein and Lekkersing Public Libraries

Stakeholders can submit their comments on the reports by completing the Comment Sheet available on the website and at public venues, writing a letter, sending an email or contact Naledzi on or before 14 December 2020.

The availability of the Draft Scoping Reports has been announced in the Gemsbok and Plattelander Newspapers on 13 November 2020 and by the placement of site notice

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	posters in the project area. An emailed notification has been sent to the list of registered I&APs on the project database.		
	Virtual meetings have been scheduled for	8 and 1/1 I	December 2020 with key
	stakeholders and commenting authorities. Public Meetings with the affected communities are scheduled for 12 and 13 January 2021. The communities meetings		
	were scheduled for 3 and 4 December 2020 had to be postponed due to the covid-19		
		iau to be post	poned due to the covid-19
1.7.2	risk in the Richtersveld area.	41 14 9	
1.5.3	The importance of public participation and		
	into the EIA Process environmental reportin		
	All the comments received during the first ro	~ ~	
	the Finalised Scoping Reports and submitted t		<b>C</b> 2
4.6	later than 11 January 2021 based on a granted 5		
1.6	Water Use License Application	Presenter	Robert Crosby, Ages (Pty)
1.6.1	The WIII A Duncage valerance to the smaller	Aisus and use	Ltd
1.0.1	The WULA Process, relevance to the applica		
	The WULA Process runs parallel to the EIA		
	identified in terms of Section 21 water uses in	terms of the N	National Water Act (Act 36
	of 1998) (NWA) include:	ъ. т	
	S 21a - Abstracting water from the Ora	-	
	loss to the Orange River will be zero.		
	be abstracted, clarified and released	l back into	the river downstream of
	workings.		
	<ul> <li>S21c – Diversion of the watercourse du</li> </ul>		
	flow – as the material is excavated, the		
	level and the influx of water into the workings will need to be considered.		
	<ul> <li>S21f – Clarified water from the filtration process at the prospecting works will</li> </ul>		
	be released back to the river – Better quality water will be released back into the		
	water. The impact of filtered water will need to be considered. There will be		
	changes in water quality in terms of suspended solids.		
	<ul> <li>S21g is related to the disposal of waste and is relevant to any stockpiles (topsoil,</li> </ul>		
	product/alluvial gravel, waste material) and temporary on-site disposal of waste;		
	■ S21i – Temporary altering of course of the watercourse, bulk sampling		
	excavation and subsequent rehabilitation within the 1: 100-year flood line, the		
	release of clarified water back into the Orange River downstream of the		
	workings		
	Application for the relaxation of conditions imposed by GN704 (GG-20119),		
	due to workings within the river flood l	ine.	
1.6.2	The overall potential impacts from the mining	operations of	n the Orange River system
	would be sedimentation to the river and the		
	Orange River in and around the bulk sampling	sites.	•
1.7	Social Development Plan (SDP)	Presenter	Dr Anthony Dywili
			(Samara)
1.7.1	A broad overview of Samara's planned SDP	was explaine	ed.
	Samara has consulted outcome five (5) and nine		
	(NDP) including the Provincial Growth and Development Strategy and narrowed these		
	down to the IDP and Local Economic Development (LED) Plan for the Richtersveld.		
	Many young people in the Richtersveld area, many under the age of 20, are without		
	jobs and critically affected by property and crime. Skills development remains a critical		
	part of job creation and poverty eradication.		
	Current diamond mining operations are bringing in the workforce from outside areas		
	because the local communities are not skilled enough to work on the mines.		
1.7.2	The broad aim and objectives of the SDP were detailed.		
$\mathbf{I} \mathbf{I} \mathbf{I} \mathbf{I} \mathbf{I}$	The broad aim and objectives of the SDP we	i e uctaneu.	

The prospecting right applications aim to ensure economic development in the Richtersveld area. Local engagement and community participation are considered critical in the process of obtaining the prospecting right applications. Samara has used the Richtersveld IDP as its data source.

90% of Samara's labour force will be sourced from the local communities of Koeboes, Sandrift, Lekkersing, Eksteenfontein, and Sendilingsdrift. This will ensure local communities benefit maximally from job opportunities emanating from this prospecting right. Samara wants to create capacity within the communities so that they can participate meaningfully.

As part of local development, Samara will avail land to local artisanal miners and support them with the necessary equipment to ensure their gradual growth and sustainable development. Samara will also ensure gender balance in all opportunities created by this prospecting right. This will be done in partnership with local stakeholders to ensure a multi-disciplinary approach.

All the stakeholder input will sharpen Samara's concept to ensure that the implementation of the project if approved, becomes a milestone and innovation of mining. Samara's research shows that former/current mining projects have had significant impacts on the environment and river system by not being able to adhere to legislation and policies.

All agricultural land will remain protected for agricultural usage. Samara will also support local farmers through linking them to national and provincial institutions focusing on funding, skills development and training. Samara will use the emerging farmers' program as a tool to support and capacitate local farmers. To ensure sustainability, Samara will set up a trust that will serve as a financial support system for agricultural development in the Richtersveld area. Samara does not want to duplicate the existing strategies in the area but enhance those.

Social development is a key priority. Samara will partner with provincial and local government to ensure that local schools, clinics and hospitals are operating optimally. Other key priorities include school transportation and feeding schemes.

1.7.3 Attendees are allowed to ask questions to gain clarity and to comment on the project.

1.7.5	Attendees are anowed to ask questions to gain clarity and to comment on the project.		
1.8	Discussion Session (All)	Response	
1.8.1	Dr Wietche Roets – National DWS	Dr Dywili (Samara)	
1.8.1.1	If the prospecting rights are approved, at which scale will be prospecting activities be implemented?	The prospecting activities will be small scale and will be implemented in a phased manner to minimise the risk to the environment.  Bulk sampling will focus on one	
		prospecting pocket at a time paired with concurrent rehabilitation. If the method proves to be successful, the works programme will continue to the next pocket. Samara will first iron out all the potential risks on a small scale operation before moving to the next focus area.	
		The aim is to implement a new mining method with a low environmental risk which can provide socio-economic development in the Richtersveld area.	

Robert Crosby, Ages (Pty) Ltd: The formal WULA for the water use authorisation will only start once the prospecting sites are determined. The PPP for the EIA and WULA has started already and is presently talking about the WULA to key role-players. It is important to have the regional DWS on board from an early stage.  Marisa Botha (NEC): We are engaging with the DWS: Orange Proto in Upington with Mrs Alexia Hlengani. The regional office has already submitted their interin comments on the draft Scoping Reports.  A fluvial geomorphological assessment should also be conducted to ensure the river mouth dynamics are not affected by the upstream mining.  Post-meeting note by Marissa Botha (will include a Geomorphic Assessment to describe the affected sections of the Orange River in terms of geomorphic reaches, physical habitat types and dominant sediment regime.  The description will include maps and statistics of physical habitat types and dominant sediment regime.  The description will include maps and statistics of physical habitat types and dominant sediment regime.  The description of the river channel (plan and cross-sectional view) will be done at the hydraulic sites (possibly the dewatered reach and below each hydro station). These data will allow for the assessment of the proposed infrastructure and required flow and sediment regimes to maintain the critical physical habitat and its maintenance processes along the areas targeted for mining.	1.8.1.2	Will the EIA Process and WULA be done parallel? Because it is ideal for these processes to run concurrently. It is also important that the regional DWS be engaged as soon as possible.	Marissa Botha, NEC: The WULA will be submitted during the EIA Phase when the location of prospecting focus areas and associated infrastructure have been confirmed based on specialist inputs and field investigations.
We are engaging with the DWS: Orange Proto in Upington with Mrs Alexia Hlengani. The regional office has already submitted their interim comments on the draft Scoping Reports.  Post-meeting note by Marissa Botha (NEC): A fluvial geomorphological assessment should also be conducted to ensure the river mouth dynamics are not affected by the upstream mining.  Post-meeting note by Marissa Botha (NEC): A Freshwater Study will be conducted by SASS Environmental Services CC and will include a Geomorphic Assessment to describe the affected sections of the Orange River in terms of geomorphic reaches, physical habitat types and sediment regime.  The description will include maps and statistics of physical habitat types along the above-mentioned reaches. Detailed geomorphic descriptions of the river channel (plan and cross-sectional view) will be done at the hydraulic sites (possibly the dewatered reach and below each hydro station). These data will allow for the assessment of the proposed infrastructure and required flow and sediment regimes to maintain the critical physical habitat and its maintenance processes along the areas targeted for mining.			The formal WULA for the water use authorisation will only start once the prospecting sites are determined. The PPP for the EIA and WULA has started already and is presently talking about the WULA to key role-players. It is important to have the regional DWS
A fluvial geomorphological assessment should also be conducted to ensure the river mouth dynamics are not affected by the upstream mining.  A Freshwater Study will be conducted by SASS Environmental Services CC and will include a Geomorphic Assessment to describe the affected sections of the Orange River in terms of geomorphic reaches, physical habitat types and sediment regime.  The description will include maps and statistics of physical habitat types along the above-mentioned reaches. Detailed geomorphic descriptions of the river channel (plan and cross-sectional view) will be done at the hydraulic sites (possibly the dewatered reach and below each hydro station). These data will allow for the assessment of the proposed infrastructure and required flow and sediment regimes to maintain the critical physical habitat and its maintenance processes along the areas targeted for mining.			We are engaging with the DWS: Orange Proto in Upington with Mrs Alexia Hlengani. The regional office has already submitted their interim comments on the draft Scoping Reports.
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			statistics of physical habitat types and dominant sediment types along the above-mentioned reaches. Detailed geomorphic descriptions of the river channel (plan and cross-sectional view) will be done at the hydraulic sites (possibly the dewatered reach and below each hydro station). These data will allow for the assessment of the proposed infrastructure and required flow and sediment regimes to maintain the critical physical habitat and its maintenance processes along the areas
Having listened to the Scoping issues there <b>NEC</b> :	1.8.1.4		Post-meeting note, Marissa Botha,

are so many red flags that have already popped up and the already acknowledged severity of impacts on particularly the flow, water quality, geomorphology, habitat and biota put these applications in a fatal flaw category for DWS. It is further cemented by the fact that it is located in a protected area. Objectives of mining operations and objectives of conservation areas are not compatible.

In terms of the DWS's perspective of pollution prevention and protection, we will not entertain a Section 21 c & i water use application inside the river, inside a protected area. In our view, we cannot stop people from applying for a water use license, but these fatal flaws will prejudice the application. The applications are in no go areas and the applications should not proceed any further than the Scoping Phase.

The Final Scoping Reports will highlight the significant impacts, legal implications and view of the DWS concerning the applications to the DMRE.

NEC will recommend to the DMRE that PRAA 2 be excluded from the authorisation process given its protection status in terms of the NEMPAA. We will recommend that only PRAA 1 continues to the EIA Phase and WULA with the exclusion of the northern section of PRAA 1 which borders the Richtersveld National Park.

Please note that the potential impacts and severity of impacts are desktop-based and still subject to specialist field investigations, a refined prospecting method and confirmed prospecting locations. Samara will be advised on the way forward based on the outcomes of the specialist investigations whether to proceed to the formal WULA.

# 1.8.2 Brent Whittington SANPARKS, Richtersveld National Park, Park Manager

1.8.2.1 Is Samara's Rotary Plan Plant technique similar to the existing diamond mining operation techniques in the region?

The current operations generate porrel mud which is pumped into slimes dams.

Where will Samara's pump its porrel mud to?

#### Dap Du Preez (Samara)

Samara has changed the Rotary Pan Plant design. All the spillage from the plant will be collected in an underpan from where it will be pumped into a tank. From the tank, the porrel will pass through a vacuum and filter system. The water will be filtered and cleaned and the silt/mud will be used as rehabilitation material to backfill the excavated areas. There will be no slimes dam.

#### Dr Dywili (Samara):

Samara has appointed environmental and water specialists to be onsite during the first phase of operations to ensure that the prospecting activities remain compliant with legislation.

# 1.8.2.2 Has Samara been to the site? The social development strategies proposed has not been achieved in the Richtersveld area in the last 50 years.

#### Dr Dywili (Samara):

Yes, we have been to the site. The Social Development Plan activities have been abstracted from the National Development Plan, Provincial

1.8.3	Thivhulawi Nethononda, DEFF, Protected	Development Strategy and Local Economic Development Plan. These plans are now enabling institutions that have a social responsibility to act in the area and allow the mining sector to contribute towards achieving these goals. It is the responsibility of the government to achieve these goals but because of the current diamond mining in the area, Samara as a mining company have a responsibility to contribute to achieving these goals. Samara has identified the specific social-economic strategies based on the lingering social issues in the Richtersveld area which has not been addressed in the last 50 years. Samara has consulted with the specific parties responsible for social-economic development to get programmes in place to step into that gap and try and solve these social issues.  Marissa Botha (NEC)
1.0.0	Areas Planning	Walissa Botha (WEC)
1.8.3.1	Has Naledzi determined why the existing diamond mining rights were not issued below the Orange River flood line?	According to our research and comments submitted by Lower Orange River Diamonds (Pty) Ltd the 1:100 year flood line has been excluded from the mining works programmes by agreement between key interested and affected parties and both governmental (DWS, DENC, DEFF) and nongovernment stakeholders to protect the Orange River from mining impacts and to ensure riverbank stability.
		<u>Dr</u> Wietche Roets, DWS: I do not have history on this matter, but from DWS's perspective, we normally don't support mining below the river flood line and riparian areas simply from a pollution and protection perspective. Such an application will require strong motivation and proper mitigations. In a system like the Orange River, the impacts can persist for a long time.
1.8.3.2	PRAA 2 is inside a protected area (Richtersveld National Park). In terms of NEMPAA section 48, subsection 1a, it is stated that despite other legislation, no person may conduct commercial prospecting,	Marissa Botha (NEC): Naledzi has stressed the legal implication in the Scoping Reports and advised Samara Mining (Pty) Ltd of the PRAA 2's protection status.

mining, exploration, production or related activities in (a) a special nature reserve, national park or nature reserve.

DEFF is not sure how the DMRE accepted the PRAA 2 application? The DEFF, DWS and DMRE discuss shared documents regularly which includes recent documents showing registered protected areas. I am not sure how the SAMRAD online system could have accepted this application.

There was not even supposed to be an EIA Process for PRAA 2 as mining in a protected area is illegal. The NEMPAA is clear on this.

1.8.3.3 Naledzi has mentioned that it has alerted the developer of the legal implications on the application areas. Why did the developer push you to continue with the EIA Process? You must provide us with these reasons? We want to hear Samara's side of the story? It is as if Naledzi is siding with the applicant and not being independent.

The PRAA 2 application acceptance in the protected area may have been an oversight by the DMRE or SAMRAD online system.

### Post-meeting note, Marissa Botha, NEC:

NEC will recommend in the PRAA 2 Scoping Report that the application area be excluded from the authorisation process due to its legal protection status.

#### Marissa Botha (NEC):

These allegations are speculative. Naledzi is not siding with the applicant. We remain independent. We have advised the applicant of the legal implications during a project kick-off meeting and in writing. Samara has chosen to continue despite our advice.

#### Ndi Mofokeng (NDI):

As independent EAP's it is our responsibility to advise the client and at the end of the day, it is the client that must decide whether to proceed with an application process.

On 28 September 2020, after the application was lodged, a meeting took place between Samara, NDI, the appointed specialists and EAP during which we conveyed our views and challenges on the applications to Samara. Samara felt that seeing that the SAMRAD online system accepted the application in the protected area, they will take their chance and continue with the applications EIA Process. NDI and Naledzi were requested to continue with all the investigations.

### Reactive comment by Willem Louw (SANPARKS):

This is very reckless by the applicant. We are glad to hear that the consultants have highlighted the legal implications clearly to the applicant and that the whole project is a no-go.

1.8.4	Willeen Olivier, DEFF: Transfrontier	Marissa Botha (NEC)
1.8.4.1	As with the WULA, the same applies to the riverine forest. Samara will need to apply for a permit to DEFF: Forestry Management for any impact on the riverine forest and potential removal thereof along the Orange River.	Post-meeting note Marissa Botha (NEC): According to the Biodiversity Scoping Report, several protected tree species, Boscia albitrunca, Vachellia erioloba and Euclea pseudogenes, according to The National Forest Act, 1998 (Act No. 84 of 1998) (NFA) are likely to be located throughout the prospecting focus area and pockets. Samara will apply for a Section 7 (1) (trees in natural forests) and Section 15 (1) (removal of protected trees) NFA permit to DEFF: Forestry Management once the location of prospecting focus areas and associated infrastructure are
1.8.4.2	Have the Richtersveld communities been consulted? They are the landowners of these application areas.  PRAA 2 is located within a protected area. The law is clear that mining is prohibited in protected areas. I don't understand why the EIA Process is still carrying on. The application is illegal. The impacts specified in the Draft Scoping Reports are all significantly high. This is a fatal flaw for the applications	Marissa Botha (NEC):  The Richtersveld communities have been notified of the applications and hard copies of the Draft Scoping Reports have been placed at the Sanddrift, Kuboes, Lekkersing and Eskteenfontein public libraries including the Sendelingsdrift SANPARKS offices. Community engagement meetings have been scheduled for 12 and 13 January 2021.  The legal implication of PRAA 2 has been highlighted in the Draft Scoping Report and the applicant has been advised that mining is prohibited in a protected area. We have advised the applicant of the legal implications during a project kick-off meeting and in writing. Samara felt that seeing that the SAMRAD online system accepted the application in the protected area, they will take their chance and continue with the applications and EIA Process. NDI and Naledzi were requested to continue with all the investigations.  Post-meeting note, Marissa Botha, NEC:  NEC will recommend to the DMRE that PRAA 2 be excluded from the authorisation process given its

1.8.4.3	The application areas belong to the local communities. The consultation process with informal land rights holders is not prescribed by NEMA. It has been set out in two court cases namely Maledo and Others and Baleni and others. These court cases were won by the communities in Rustenburg and Xolobeni (Eastern Cape). Samara needs approval from each community member to prospect in the area. The 12 and 13 January 2021 community meetings are not enough to meet the legal	protection status in terms of the NEMPAA. We will recommend that only PRAA 1 continues to the EIA Phase and WULA with the exclusion of the northern section of PRAA 1 which borders the Richtersveld National Park.  Post-meeting note, Marissa Botha, NEC: The community consultations and public meetings scheduled for 12 and 13 January 2021 are being conducted in terms of the NEMA EIA Regulations of 2014 as prescribed for the EIA Process and is aimed to provide the communities with information regarding the EIA Process and findings of the Scoping Report and
	requirements and to get approval from the communities. Samara does not indicate anywhere how these communities are going to be paid rent for the use of their land for mining.	to answer any questions of clarity the communities may have.  The engagement process aimed at obtaining community consent is a separate engagement to the EIA and must be obtained by Samara Mining (Pty) Ltd and presented to the DMRE.  The application for a mineral surface
		lease agreement falls outside the scope of the EIA Process.
1.8.4.4	The international border is a highly contentious issue; you need to involve the Department of International Relations and Cooperation (DIRCO) in this consultation process. You might just create an international incident if you go an inch beyond the international border. The borderline is not clear.	Post-meeting note by Marissa Botha (NEC): Naledzi will engage with the ambassador for Namibia and DIRCO in January 2021 to verify the location of the international border and obtain confirmation in writing. Both stakeholders have been added to project I&AP Database.
	Naledzi needs to engage with ORASECOM. It is a body created by the United Nations to deal with all the trans-border issues around water usage from the Orange River. They need to be involved in this process.	Post-meeting note by Marissa Botha (NEC): ORASECOM is a registered I&AP on the project database. The EIA Process notifications and meeting invites have been sent to the organisation. Naledzi will follow up with the organisation secretary whether they have received the information and engage with them in January 2021.
1.8.4.6	PRAA 2 is illegal and will not succeed. The northern part of PRAA 1 needs to be cut out of the PRAA 1 application area because it too	Post-meeting note by Marissa Botha (NEC): Agreed. Naledzi will recommend in the
		16

	falls within the Richtersveld National Park and it is illegal.	Draft Scoping Report for PRAA 2 that the application area be excluded from the Samara applications. In the PRAA 1 Scoping Report, it will be recommended that the northern portion of PRAA 1 that falls within the Richtersveld National park be excluded from the application area.
1.8.4.7	The Ais Ais Trans-Frontier Conservation Area (TFCA) was set up based on an international treaty signed by Thabo Mbeki and certain implications need to be considered. The TFCA and its international partners need to be consulted through the structures that the treaty has set up. You can read the treaty. Certain processes need to be followed and Naledzi has not followed one of the processes in terms of decent consultation. There is still a lot of work to be done.	Post-meeting note, Marissa Botha (NEC): Naledzi will recommend in the PRAA 2 Final Scoping Report that the entire application area be excluded from the authorisation and EIA Process due to its legal protection status. For PRAA 1 it will be recommended that the northern portion of the application area be excluded since it also falls within the protected area, namely the Richtersveld National Park and Ais AIs TFCA.
1.8.4.8	To tie in with the comments from Peter Cloete from DENC (1.8.5.4 below), this is a NEMA application and the DMRE has access to the DEA Screening tool. How this application got accepted without the DMRE using this tool, I have no idea. This application should never have been accepted.	Post-meeting note, Marissa Botha, NEC:  Noted. This may have been an oversight by DMRE and or the SAMRAD online system. The DMRE will be furnished with the Final Scoping Reports which will detail the sensitivity and legal implications on the application areas. DMRE will then need to decide and advise on the way forward with the applications. The scenario would most probably prevail is that only PRAA 1, excluding the northern portion, continue to the EIA Phase.
1.8.5	Peter Cloete, DENC, Springbok	Tituse.
1.8.5.1	What is the area zoned for in terms of SPLUMA?	Post-meeting note, Marissa Botha, NEC: PRAA 2 falls within the Richtersveld National Park alongside existing diamond operations. The Park has its zoning plan. The prospecting focus areas are earmarked as 'primitive' and 'low intensity leisure'. Primitive areas are conservation-oriented to protect the sensitive environment from development impacts. Low-intensity leisure is tourism-oriented to provide infrastructure for day and overnight visitors in a natural environment.

		Richtersveld does not currently have a valid Spatial Development Framework for NEC to confirm the zoning of the applications areas. But it is anticipated that PRAA 2 will be earmarked as 'Protected Area' and PRAA 1
		The prospecting right areas, according to the Northern Cape Province Spatial Development Framework (NCPSDF, 2012), are located within the Gariep Centre (GC) of plant endemism which encompasses the Richtersveld and extends northwards into Namibia's Spergebied and supports 355 endemic plant species. The prospecting activities do not fall within a specific development corridor set out for the Northern Cape Province.
		According to the communities, the land alongside the Orange River was set out for agriculture however has been significantly impacted by mining.
1.8.5.2	The area is located within a CBA 1, which is the highest level of protection. The Lower Gariep Alluvial vegetation which is critically endangered. The Orange River is classified as an NFEPA. Considering all these aspects and after all the mitigation measures have been exhausted, a biodiversity offset must be considered in the planning phase.	Marissa Botha, NEC: The recommendation of a biodiversity offset will be considered and addressed in the EIA Phase. The Biodiversity Impact Assessment Study, EIR and EMPr will include such details.
1.8.5.3	What type of agricultural activities is Samara planning to include in the SDP?	Dr Dywili (Samara)  The public engagements are still coming up. We don't want to pre-empt these people. We would want to obtain a directive from the local people. It has merely been highlighted as a priority in the SDP and no programmes have been prepared. We will solicit the inputs from the community first to determine their interest and align them with the emerging agricultural development plan.
1.8.5.4	Did you consult the DEA Screening tool before you applied? Because in the screening tool it would have highlighted all the sensitive areas.	Marissa Botha (NEC):  NDI submitted the application on behalf of Samara to the DMRE and it did not include the Environmental Screening Report. NEC was only appointed post application submission.  Post meeting note, Marissa Botha,

		NEC:
		The DEA Screening Report has been
		generated for both application areas
		and will be submitted to the DMRE as
		part of the finalised Scoping Report.
1.8.6	Willem Louw, SANPARKS	Marissa Botha (NEC)
1.8.6.1	The closing date for consultations is 14	The commenting period on the Draft
1.0.0.1	December 2020. As far as I know, this is the	Scoping Reports already commenced
	first consultation. There has been no	on 13 November 2020. Consultation
	consultation with the Richtersveld people;	has many forms in term of the NEMA
	Naledzi has pulled out of those meetings.	EIA Regulations of 2014 which
	ivaledzi nas puned out of those meetings.	includes advertising in the local
	From the start, our biggest issue is that the	newspapers, placing site notices on-
	applications fall within the Richtersveld	site, email notifications, and direct
	* *	phone calls. These consultations have
	National Park and World Heritage Site. It has	*
	been admitted in the Draft Scoping Reports	been taking place since 13 November
	that mining is prohibited in a national park	2020 and end on 14 December 2020,
	and World Heritage site. I don't understand	hence a 30 day public review period
	why this EIA Process is carrying on. Most of	has been provided on the draft Scoping
	the likely impacts listed in the Draft Scoping	Reports. This is only the first round of
	Reports are rated as having a very high significance.	public engagements. The second round will be conducted during the EIA
	significance.	Phase. However, consultations are
	It is mind-boggling that the EIA Process is	conducted throughout the EIA Process.
	still carrying on. The applications are fatally	conducted unoughout the LIA 1 locess.
	flawed.	We have not been able to meet with the
	nawcu.	communities yet. We went to the
	The public consultation ends on 14 December	project area from 1 – 5 December
	2020. The communities staying in the	2020, but have had to postpone the
	application areas are the landowners. Naledzi	community meetings due to the covid- 19 risk in the Richtersveld area. The
	has never consulted them and the consultation	
	period ends today, 14 December 2020. These	community meetings have been
	are the major stumbling blocks of this project.	rescheduled for 12 and 13 January
		2021. We have been communicating
		with community members through a
		Whatsapp Group. We have received
		initial comments from the communities
		via this platform which will assist us
		with the January 2021 community
1062	Have the appointate visited the united	engagements.
1.8.6.2	Have the specialists visited the project area	Marissa Botha (NEC)
	yet?	The specialists have not been able to
	Please note that anybody who wishes to enter	visit the application areas yet. Naledzi is still seeking access consent from the
	the national park requires a permit in terms of	existing diamond mining operations to
	Section 45 of NEMPAA. One cannot just	access the bulk sampling sites.
	enter the park.	Currently, the proposed bulk sampling
	enter the park.	sites are only accessible from existing
		mine operation gravel roads. Therefore
		Specialists will only be able to visit the
		-
		site for field investigations in January /
		February 2021. The Scoping Reports

		and Specialist Scoping Reports are desktop based. All the presented findings are desktop-based until we can access the site.  Noted. We will apply for such a
		permit.
1.8.6.3	With regards to the SDP; Dr Dywili, have you engaged with the landowners of the area yet?	Dr Dywili (Samara) We are going to consult the local landowners in January 2021. The social issues identified in the Richtersveld area remains the priority of the local and national government. Samara is proposing through its Social Development Plan to come in as a partner. Government has a social role to undertake to uplift the lives of the local communities and that is the emphasis of Samara's strategy. Samara will not pre-empt the people but align is strategies based on the outcomes of
1.8.6.4	Dr Dywili, do you know who the landowners are?	community engagements.  Marissa Botha (NEC):  We know who the landowners are. We have been consulting with SANPARKS, Department of Public Works, Richtersveld Communal Property Association and the Richtersveld CPA Administrator, Mr Donovan Matjiet. We have also been in consultation with the existing Mining right holders Lower Orange River Diamonds (Pty) Ltd and Oena Diamond Mine.  All the Windeed Title deed searches show that the PRAA's still falls under state-owned land. We know that the
		Richtersveld National Park is managed by SANPARKS with the Richtersveld CPA.
1.8.6.5	The land is held in trust by the Minister of Land and Rural Development and is currently in the process of being handed over to the rightful owners namely the communities of Sanddrift, Kuboes, Lekkersing and Eksteenfontein.	Marissa Botha, NEC: Noted. Thank you we will be consulting the communities in January 2021. The meetings have been arranged for 12, 13 January 2021.
	They are the informal landowners and need to be engaged. They are called the free prior informal informed consent. NEC needs to change its whole consultation approach.	

The PPP is not just a matter of consulting the community; Samara needs their consent to prospect on the land. Samara needs prior consent from the communities. Documents need to be brought to the communities in Afrikaans and Nama. That is the legal process that needs to be followed. Please refer to the process specified under IPILRA, the Interim Protection of Informal Land Rights Act (Act 31 of 1996).

Important to note is that the consent is not required from the municipality nor the CPA Administrator. You need to consult the communities. The last thing, there is a current legal mineral and land claim on the Lower Orange River Diamonds (Pty) Ltd or old TransHex mining lease area.

1.8.6.6 Clause 9B in NEMPAA states that no mining is permitted in a world heritage site.

It was the EAP's responsibility to advise the applicant of all the red flags in the application areas. Naledzi has highlighted the irreplaceable value of the biodiversity of the application areas in the national park in the riverbed.

Your responsibility does not stop there. You needed to advise the client that they cannot apply for a prospecting right in a national park. These applications are not permissible and are no-go areas. You should have advised the client to stop the whole process. This application should never have been entertained by anybody.

My recommendation is that you stop this whole process.

#### Marissa Botha (NEC):

NEC and NDI have advised Samara of the legal implications of the application areas.

We have highlighted these legal implications to the applicant during a project kick-off meeting, in the Draft Scoping Reports and notification letters to interested and affected parties. The applications for environmental authorisation were already submitted by the time Naledzi was appointed to facilitate the EIA Process.

We also highlighted in the notification letters to I&APs that the application acceptance might have been an oversight by DMRE. The legal implications are highlighted in the Scoping Reports and will be submitted to the DMRE for acceptance.

### Post-meeting note, Marissa Botha (NEC):

Naledzi will recommend in the PRAA 2 Final Scoping Report that the entire application area be excluded from the authorisation and EIA Process due to its legal protection status. For PRAA 1 it will be recommended that the northern portion of the application area be excluded since it also falls within

1.8.6.7	I just want Naledzi to rectify in their Scoping Report the part where it is said that mining is already taking place in the area by Lower Orange River Diamonds (Pty) Ltd, TransHex and Oena Mine. We need to emphasise that NEMPAA already makes provision for mines operating in the area before the enactment of the NEMPAA.  Also, you need to rectify where it is said that the Minister of Minerals will need to decide upon an application in a protected area. It must read the Minster of Environment.	the protected area. The EIA Process is thus only to continue on sections of PRAA 1 which do not fall within the protected area.  Post-meeting note, Marissa Botha, NEC: Naledzi does specify this in the PRAA 2 Draft Scoping Report under Section 2 (e) 'Policy and Legislative Context', under the legal context given for both sections 48 of MPRDA and NEMPAA wherein it is explicitly stated that "Only existing lawful mining concessions operating before 2004 may proceed in a protected area subject to strict environmental management. Any new prospecting or mining-related activities are prohibited in protected areas."
		It has been stated in the draft Scoping Reports that in terms of section 48 of NEMPAA that "no person may conduct prospecting or mining activities in special nature reserves or protected areas without the prior consent of the Ministers of Mineral Resources and Environmental Affairs."  It does not only refer to the Minister of Mineral Resources.
1.8.7	Dr David Morris, McGregor Museum Kimberley	Post-meeting note, Marissa Botha, NEC:
1.8.7.1	The Orange River banks are very sensitive. I have seen devastating previous mining impacts on rock art and other sites. There are also graves on the river banks. The provincial heritage authority must form part of the engagement process. The provincial heritage authority should have been part of this engagement meeting.	The Heritage Scoping Report completed by Millennium Heritage Group has identified the potential for rock art, graves and other sites along the banks of the Orange River that requires in-depth field investigation during the EIA Phase. This is addressed under section 2iv (1)(a) (1.12 Table 4) of the draft Scoping Reports and the attached Appendix 5 Heritage Scoping Report.
1.8.8	Natasha Higgit, SAHRA	Post-meeting note, Marissa Botha, NEC:
1.8.8.1	SAHRA only has the mandate to comment in terms of the South African Heritage Resources Act. SAHRA has provided interim comments on both application areas Scoping Reports on Friday, 11 December 2020.	The comments have been received for both applications and will be made available to the Archaeologist and included in the Final Scoping Reports to the DMRE.

1.8.8.2	One report was submitted for both application areas and I recommend that separate reports are submitted according to each application area. If only one report is provided the application areas should be dealt with separately in the report.  The Heritage Impact Reports must also separate the National and World Heritage issues in the reports. SAHRA cannot comment on issues such as outstanding universal value.  If the EIA go ahead, the impacts on heritage resources must be assessed. Please ensure that the comment by Dr Morris is addressed by the heritage specialist.	Noted. Only one Heritage Report will be generated for the project. NEC will recommend in the Final Scoping Reports to DMRE that PRAA 2 be excluded from the authorisation and EIA Process given its legal status as a protected area.  Noted. The Archaeologists will be advised to separate the issues in the Heritage Impact Report for PRAA 1.  A Heritage and Palaeontological Impact Assessment Study will be commissioned as part of the Impact Phase of the EIA Process and has been detailed in the Plan of Study for EIA in the last sections of the Scoping Reports. The comments from Dr Morris will be provided to the Archaeologist to address in the Heritage and Paleontological Impact
1.9	Closure	Assessment Study.  Presenter Marissa Botha (NEC)
1.9.1	The way forward was recapped. Naledzi will	prepare the minutes of the meeting and
	make it available to participants via email. The submissions made on the Draft Scoping Report Scoping Reports for submission to the DMRE.	
1.9.2	The Finalised Scoping Reports will be submitt 11 January 2021. The DMRE will have 43 days	s to accept or reject the Scoping Reports.
1.9.3	Interested and Affected Parties will be notified Reports.	of the DMRE's decision on the Scoping
1.9.4	Participants were thanked for their comments a	nd the meeting was closed.

#### **Attachments:**

**Annexure A-Zoom Participants List** 

**Annexure B - PowerPoint Presentation** 

Annexure C – Maps

Annexure D – Key Plan

The recording of this meeting is available from the following One Drive folder:

https://ldrv.ms/u/s!Aphfm3X6bo0Gj3083hZiF3pR3Smw?e=visFZm

Meeting ID: 82917567980

Topic: Authorities Meeting - EIA Study & WULA Samara Mining Prospecting Right Applications, Orange River, Richtersveld, Northern Cape, South Africa

Date: 14 December 2020, 10:00

Participants:

#### Name (Original Name), User Email, Join Time, Leave Time, Duration (Minutes)

Marissa Botha (Naledzi) (Desmond Musetsho), dmusetsho@naledzi.co.za,12/14/2020 09:40:36 AM,12/14/2020 11:52:51 AM,133

Tina vd Merwe,,12/14/2020 09:49:48 AM,12/14/2020 09:50:00 AM,1

Tina vd Merwe,,12/14/2020 09:50:00 AM,12/14/2020 01:10:57 PM,201

Ndi,,12/14/2020 09:55:47 AM,12/14/2020 09:56:17 AM,1

Ndi,,12/14/2020 09:56:18 AM,12/14/2020 01:11:05 PM,195

Peter Cloete,,12/14/2020 09:56:20 AM,12/14/2020 09:56:28 AM,1

Peter Cloete,,12/14/2020 09:56:28 AM,12/14/2020 10:11:24 AM,15

Willem Louw,,12/14/2020 09:56:52 AM,12/14/2020 09:56:59 AM,1

Willem Louw,,12/14/2020 09:57:00 AM,12/14/2020 10:00:42 AM,4

Brent Whittington,,12/14/2020 09:58:15 AM,12/14/2020 09:58:28 AM,1

Brent Whittington,,12/14/2020 09:58:28 AM,12/14/2020 12:52:06 PM,174

Natasha Higgitt,,12/14/2020 09:59:44 AM,12/14/2020 09:59:51 AM,1

Dr Morris,,12/14/2020 09:59:49 AM,12/14/2020 09:59:57 AM,1

Natasha Higgitt,,12/14/2020 09:59:51 AM,12/14/2020 12:52:13 PM,173

Dr Morris,,12/14/2020 09:59:57 AM,12/14/2020 12:52:19 PM,173

Robert Crosby,,12/14/2020 10:00:34 AM,12/14/2020 10:00:44 AM,1

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Willem Louw,,12/14/2020 10:01:00 AM,12/14/2020 12:52:21 PM,172

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Bridget Tshioma, btshioma@gmail.com, 12/14/2020 11:38:02 AM, 12/14/2020 01:11:05 PM, 94

Marissa Botha,dmusetsho@naledzi.co.za,12/14/2020 11:56:11 AM,12/14/2020 01:05:29 PM,70

#### **EIA STUDY AND WATER USE LICENSE APPLICATION**

### **SAMARA MINING (PTY) LTD**

ALLUVIAL DIAMOND PROSPECTING RIGHT APPLICATIONS
WITH BULK SAMPLING

DMR REF. NCS 30/5/1/1/2/12664 PR, 12663 PR

#### **AUTHORITIES MEETING**

9 DECEMBER 2020, 10:00



### Introductions



**APPLICANT - SAMARA MINING (PTY) LTD** *Hereinafter Samara* 



GEOLOGISTS & PROJECT MANAGER (AGENT TO SAMARA)



**NEC INDEPENDENT EAP TO FACILITATE EIA STUDY** 

Meeting Facilitator: Marissa Botha

PLEASE NOTE THIS SESSION IS BEING RECORDED

## Agenda

- 1. Purpose of the meeting by Naledzi
- 2. Application Summary by Naledzi
- 3. Project Background and Prospecting Method by Samara
- 4. Overview of the EIA & Public Participation Process by Naledzi
- 5. Potential Impacts, legal implications as per EAP and Specialist Scoping
- 6. Planned EIA Study Specialist Investigations by Naledzi
- 7. Water Use License Application (Naledzi / Ages)
- 8. Discussions (All)
- 9. Way Forward (Naledzi)

# Purpose of Meeting

- □ Provide **legal background of applications**
- Provide an overview of the applications and location
- Overview of the EIA Process and Public Participation Process followed
- Provide the potential biophysical and socio-economic environment impacts
- Detail any legal / project implications
- ☐ Give stakeholders **opportunity to seek clarity**
- □ Solicit comments from stakeholders for consideration in the EIA Study
- ☐ Record comments in the Final Scoping Report for consideration by DMR

### Legislative requirements

Legislation

Requirement

**Authority** 

Prospecting with Bulk Sampling

Section 16, 20 of MPRDA (Act 28 of 2002)

Application for Prospecting Right

DMRE - Springbok

NEMA EIA Regulations of 2014 (GNR 326)

(GNR 326)

EIA Listing Notices GNR 327 – Activity 20 GNR 325 – Activity 19 Application for Environmental Authorisation (EA)



**EIA Process** 

**Scoping Phase** 

Scoping Report

30 days public review & comment

**EIA Phase** 

Specialist Studies
EIR & EMPr
Rehabilitation Plan
Financial Provision

30 days public review and comment

# **Application Summary**

□Samara has submitted two applications for environmental authorisation for alluvial diamond prospecting with bulk sampling to DMRE: Springbok on 22 July 2020. DMRE has 'accepted' the applications on 15 September 2020.

Table 1: Prospecting Right Application Areas (PRAA)

Application DMRE Ref	Property	Size
PRAA 1 NCS 30/5/1/1/2/12664 PR	Left bank of the Orange River boundary to Portion of Remainder of Farm Richtersveld No. 11	987.98 Ha
PRAA 2	Left bank of the Orange River boundary to Portion of	690 Ha
NCS 30/5/1/1/2/12663 PR	the Remainder of Farm No. 18	

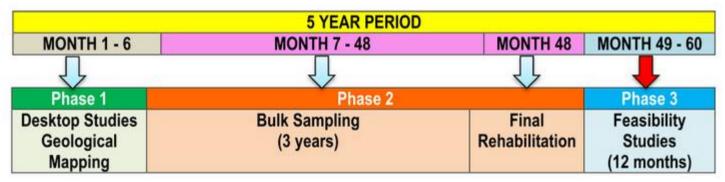
- ☐ If granted, the prospecting rights will be valid for five (5) years.
- □ Samara is requesting for environmental authorisation for eight (8) years in case of renewal of the prospecting right for another three (3) years.

### **Location of Applications**

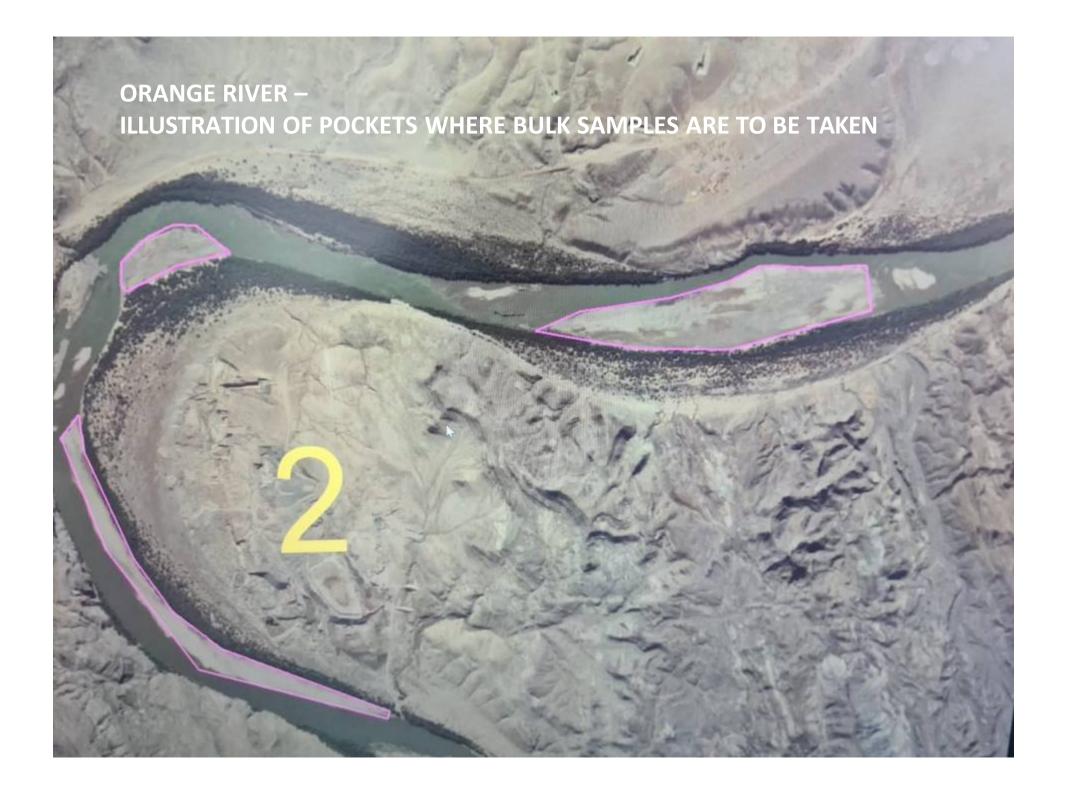
- Ward 1 & 2 of the Richtersveld Local Municipality, Namakwa District Municipality, Northern Cape Province, South Africa
- □On the left / south bank, below the floodline of the Orange River near Sendelingsdrift, on the border between South Africa and Namibia, approximately 30km north east of Alexander Bay.
- □ The high-water level on the northern bank of the Orange River demarcates the SA border (1890 treaty). Prospecting will thus take place in SA.
- □PRAA 1 12664 PR is approximately 250m west of Sanddrift
  - ☐ On Orange River within 10kmof Richtersveld Botanical and Cultural Landscape, Richtersveld National Park
  - □ ..\..\..\Scoping Report & PoS\Scoping Report 12664 PR PRAA 1\Finalised PRAA 1 PR 12664\PRAA 1 Appendix 3 Location Map REGULATION 2(2) 12664.pdf
- □PRAA 2 12663 PR is approximately 10km northeast of Sendlingdrift
  - □ Located within the Richtersveld National Park, Richtersveld Cultural and Botanical Landscape World Heritage Site
  - □ ..\..\Scoping Report & PoS\Scoping Report 12663PR PRAA 2\Finalised Scoping Report\PRAA 2 Appendix 3 Location Map REGULATION 2(2)[1] 12663.pdf

## Prospecting & Bulk Sampling Details

- □ Samara will prospect for alluvial diamonds from the bed, banks, active channel and various terraces along the Orange River, within the 1: 100-year flood line of the river.
- □Bulk sampling will focus on several prospecting pockets within the two greater prospecting right areas (PRAA):
- □PRAA 1 & PRAA 2 Pockets (Google Earth illustration)..\..\..\Prospecting
  Target Areas\new maps 20201207\baken pockets.png
- □..\..\..\Prospecting Target Areas\new maps 20201207\OENA POCKETS.png
- **DURATION:** The PWP will be conducted over a five (5) year period.



- ☐ Phase 2 will include invasive Bulk Sampling (3yr) with concurrent rehabilitation
- Positive results in Phase 3 = Samara apply for Mining Permit to start 'pilot mine'



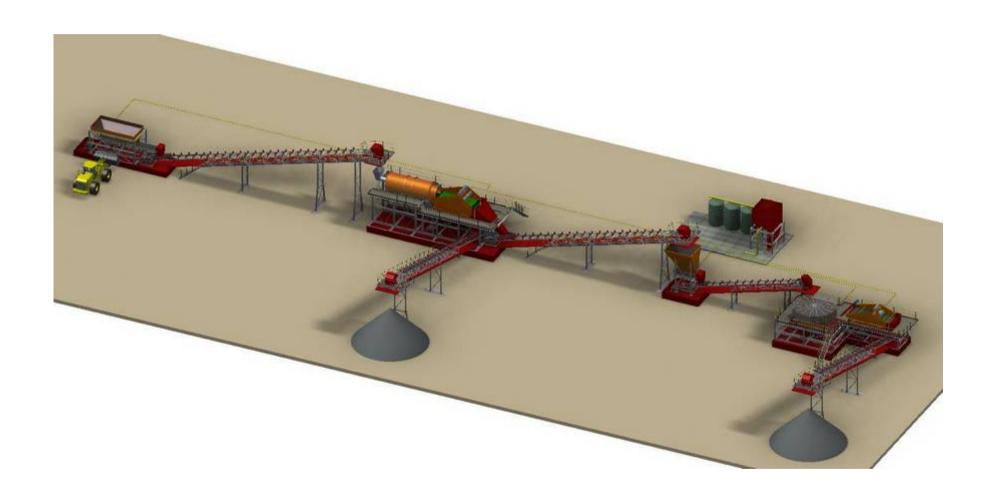
# Prospecting & Bulk Sampling Method

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<b>— IV</b>		IUU	JIA	LIV	/ILINI	

☐ Site preparation (doze off vegetation, topsoil)
□Excavate <b>10 trenches</b> per application area, each 100m x 25m x 4m with each sample size being 10 000m3. Trenches will be excavated from prospecting pockets.
□Load and haul samples to a Rotary Pan Plant to process, screen, concentrate samples and recover diamonds. No chemicals will be used in the process.
□Minor temporary diversions of the river will be constructed to gain access to alluvia material. A channel way will be excavated from the current river flow on the dry side of the river bed. Open bottom and top entrances will be included to allow flow through new channel and include a cast bunt wall in the river to direct flow through the new channel.
☐ Tailing and overburden will be backfilled (returned) into excavations, followed by topsoil.

□ Distributed areas will be appropriately rehabilitated according to environmental guidelines.

# Rotary Pan Plant Design

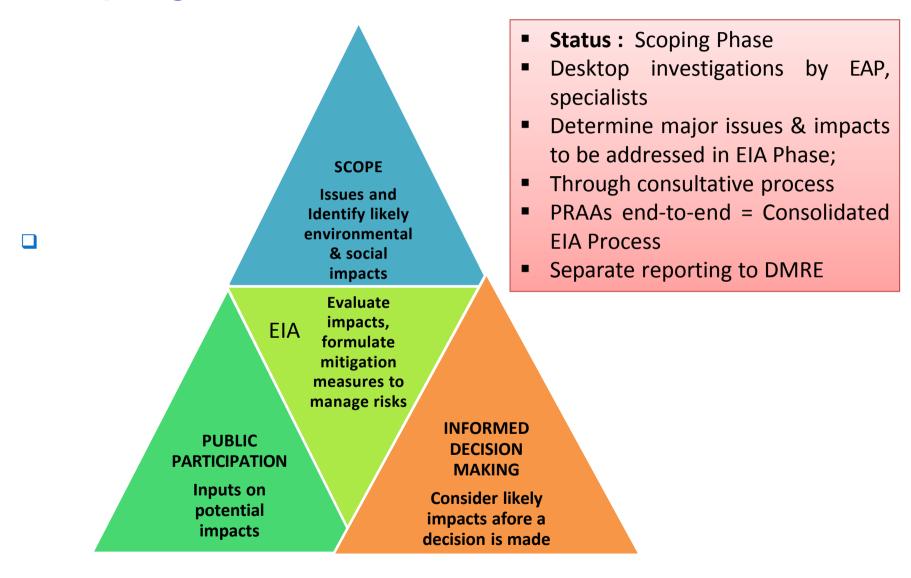


# Prospecting & Bulk Sampling Details

#### ☐ INFRASTRUCTURE WILL INCLUDE:

- Ablution facilities;
- □ Access roads
- Diesel storage facilities
- Fences
- Office sites
- Stockpiles
- Rotary Pan Plant
- □ Contractor's camp
- ■Vehicle parking areas.
- □ The Rotary Pan Plant will be located on the Orange River embankment below the 1: 100 year flood line, above the active channel, not less than 50m from the river bed. Only machinery and associated pumps will be located within the riverbed. No slimes dam will be constructed as part of the processing infrastructure.
- □The location of processing infrastructure must still be finalised based on the recommendations to be made by the specialist investigations;

# Scoping & EIA Process



### **EIA Process**



### Scoping Phase

- Identify potential environmental risks of project to focus EIA study on through a consultative process
- Determine which specialist studies are required
- Presented in Scoping Report

1<sup>st</sup> Round

### **EIA Phase**

- Consider identified environmental risks and assess significance of risks through specialist investigations.
- Consolidate and present findings of assessment in Environmental Impact Report
- Prepare an EMPr which recommends how to operate and implement the project

2<sup>nd</sup> Round

### Decision Making

Authorities review EIA findings and reach a decision on the application



### **PUBLIC ENGAGEMENT THROUGHOUT**

We are here

# **EIA Process Timeline**

	Requirement	Status / Anticipated date
PHASE	Applications for Environmental Authorisation	✓ Lodged 22 July 2020 ✓ Accepted 15 Sept 2020
G PF	Prepared Scoping Reports PRAA 1 & 2	✓ November 2020
SCOPIN	Round 1 of Public Participation (SR 30 days public comment)	13 Nov 2020 until COB 14 December 2020
SC	Submit Final Scoping Reports to DMRE	By 8 January 2021 (law)
PHASE	Specialist Studies EIR & EMPR Reports PRAA 1 & 2 Closure & Rehabilitation Plan Financial provision for rehabilitation costs	End January - February 2021 March - April 2021
EIA	Round 2 of Public Participation (30 day public comment)	May 2021
	Submit Final EIR & EMPr reports to DMRE	June 2021
	Decision by DMRE: Springbok	September 2021

22/12/2020

### Completed Scoping Phase Tasks

## Desktop Investigations by EAP, Specialist Scoping Reports October 2020

Desktop Studies - Biodiversity, Freshwater Study/Aquatic Ecology Surface & Groundwater, Visual, Heritage and Palaeontological

## Draft Scoping Reports available for 30 day public review & comment 1<sup>ST</sup> ROUND OF PUBLIC ENGAGEMENT

Notice in Gemsbok, Plattelander newspapers on 13 Nov 2020
Site notices in project area: 13-16 Nov 2020
Place Scoping Reports at public libraries, venues and website
(Notice + reports at Alex Bay, Port Nolloth, Sanddrift, Sendelingsdrift, Kuboes, Lekkersing, Eksteenfontein, <a href="https://www.naledzi.co.za/publicdocuments">www.naledzi.co.za/publicdocuments</a>)
DSRs currently available for public review from 13 Nov until 14 Dec 2020
Conduct public meetings (virtual, on-site):

We are here

Key Stakeholder virtual meeting - 8, 14 Dec 2020

3, 4 Dec 2020 Community Public meetings rescheduled 12, 13 Jan 2021



Record public submission and Finalise Scoping Reports by 18 Dec 2020



### **Submit Final Scoping Reports to DMRE**

Naledzi has 50 day extension to submit until 11 January 2021

?
President
announcement
on Covid-19
14 Dec 2020
@ 8pm

### Round 1 of public engagements

- DSRs hard copies are available at the following public venues:
  - Sendelingsdrift SANPARKS Offices
  - Sanddrift, Kuboes, Eksteenfontein and Lekkersing Public Library
  - Naledzi website: <a href="http://www.naledzi.co.za/public-documents-naledzi.php">http://www.naledzi.co.za/public-documents-naledzi.php</a>
- The availability has been announced through adverts, notice boards and emailed notifications to I&APs;
- Virtual meetings scheduled on 8, 14 December 2020
  - 8 Dec 2020 Local & district government, Key organs of state, I&APs
  - 14 Dec 2020, 10am Key organs of state
  - 14 Dec 2020, 2pm Registered I&APs (all other parties registered on database can participate including downstream water users),
- Public Meetings with the affected communities scheduled for 3-4 Dec 2020 have been postponed until 12, 13 January 2021 due to claims of application overlapping existing LoR MRA and covid-19 risk in the Richtersveld;
- In consultation with Richtersveld LM & councillors January 2021 public meetings have been announced (notice boards, Whatsapp Group, email)

# Scoped issues, potential impacts - A

#### **IMPLICATIONS**

- ■PRAA 2 is within a protected area (Richtersveld National Park, Richtersveld CBL World Heritage Site).
  - ☐ Applicant and I&APs notified of this issue on DSR availability letter.
- □ SPATIAL QUERY WITH DMRE Claims of Samara Prospecting Right Applications overlapping Lower Orange River Diamonds (Pty) Ltd and Oena Mine Mining Right Area (LOR already hold rights to diamonds).
  - □ NEC submitted spatial query to DMRE and notice of denied access on 4 Dec 2020;
  - □Samara, LOR and DMRE engaged on 11 Dec 2020 in this regard. (Samara provide outcome?)
- □ **EXISTING LAND USE:** Existing diamond mining operations in PRAAs. Livestock farming and grazing along banks of Orange River (water, riparian vegetation).
  - □ Samara to negotiate access or agreement with LoR & Oena Mine for placement of infrastructure.
  - Livestock farmers still require access to banks of Orange River for grazing

# Scoped issues, potential impacts - B

#### **SIGNIFICANT FEATURES ONSITE & IMPACTS:**

to god		al condition	on (Clas	s A/B), v	while th	ne PRAA 2	_		sified as being range River is	•
PES	1999 class	sification	as wel	as the	NBA	(2018), th	e Orange	River	is considered	moderately

- modified. This is mainly attributed to historic and ongoing anthropogenic activities taking place within close proximity to the Orange River i.e. historic and active sand and diamond mining, establishment of settlements and construction of a formal road on the Namibian side of the system. Significant impact from water abstraction from the system is also deemed likely.
- □ According to the PES /EIS Dataset (DWS, 2014) the Orange River is host to numerous fish and macro-invertebrate species all of which may potentially be affected should any disturbance occur within the Orange River.
- ☐ The bulk sampling activities will take place directly adjacent and within the delineated boundary of the Orange River and the potential impact on the river is significant.
- □Water diversion and impedance to limit ingress of water to excavations would result in reduced river flow volume in the Orange River, which will impact on the functioning of the Orange River gauging weirs and affect their accuracy. Sedimentation and erosion control will be vital at focus areas. Changes in river flow volume will impact on downstream water users
- □PRAA 1 & 2 are 30km upstream of the Orange River Mouth Ramsar Site sedimentation from bulk sampling have the potential to affect the Orange River Mouth. Such impact, if regarded as significant, will be unacceptable.

# Scoped issues, potential impacts - C

■Bulk sampling activities have the potential to impact on the groundwater quantity by lowering static water level and localised dewatering;
☐ Groundwater contamination may take place due to petro-chemical spills, increased sediment loads and possible e-coli contamination from on-site sanitation.
■Applications located in the Gariep Centre of plant endemism and are associated with the endangered Lower Gariep Alluvial vegetation – listed as National Threatened Ecosystem, 2011;
☐Biodiversity: Several protected tree and floral species have the potential to be located within the prospecting focus areas;
☐ Richtersveld National Park has high eco-tourism aspect. The prospecting activities will have the potential to have a significant impact on the ecotourism of the area (hiking, sport fishing, bird watching, river rafting, high biodiversity, camping sites)
☐ Heritage Resources: Stone tool sites scattered along the Orange River banks are likely to be impacted by the prospecting and sampling activities. Any impact on these features will be permanent and non-reversible.
□PRAA 1 pockets in proximity to Jakkalsberg archaeological site. The site contains unique collection of artefacts attributed to ancestors of Nama herders. Jakkalsberg, an open site on the banks of the Orange River.
Palaeontological Sensitivity – Moderate, low to insignificant. Possibility for fossil finds still exist. The rocks of the Gariep Supergroup that underlie the sediments in the western part of the study site may contain stromatolites.

# Scoped issues, potential impacts - D

The Orange River System is extremely ecologically important and sensitive. The bulk sampling activities poses a very significant risk to the system. Essential that all aspects of bulk sampling activities are considered in extensive detail, and all aspects are exceptionally well planned and executed. It must also be noted from the outset that significant constraints are likely to be placed on the activity to conserve the environment, as a minimum, if the development is authorised to proceed at all.

### ■Visual Impact:

- □Area is naturally dark with limited/ no sources of nigh time-light. Activities likely to have a very high visual impact on the landscape character, sense of place and visual quality of the area, due to the sensitivity of the focus area situated within the Richtersveld National Park, not necessarily the nature and size of the operation.
- Bulk sampling activities may have a potentially very significant negative visual impact on the camping sites within the Richtersveld National Park.
- Sensitive Receptors include settlements Klipheuwel, Sendelingsdrif, Auchas, Sanddrift, and Skilpad. There are limited gravel roads on the SA side of the Orange River, however several roads are present on the Namibian side of the river; namely: the Daberas Pass, Auchas Pass, Niklaas Pass and the formalised C13 Road running along the Orange River.
- □A full list of potential impacts are included in the Scoping Reports for the applications and Specialist Scoping Reports and are subject to further indepth fields investigation by specialists and EAP

### LEGAL IMPLICATIONS

□ PRAA 2 is located within a protected area (Richtersveld National Park, Richtersveld Cultural Botanical Landscape). According to NEMPAA these areas are legally protected, and mining herein is prohibited;
Other as per Biodiversity and Conservation Plans:
□According to Northern Cape Critical Biodiversity Areas (2016) database, the focus area was identified as falling within a Critical Biodiversity Area (CBA1) and within a Protected Area
□PRAA 1 fall within a CBA1 area, whereas PRAA 2 pockets are located within a protected area.

- □ Protected and CBA1 areas consist of intact, undisturbed ecosystems.
- □ According to Namakwa Bioregional Plan in terms of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004), strictly no mining is allowed within these regions.
- □Mining and Biodiversity Guideline 2013 PRAA 1 pockets 2, 3A and 3B are located in area of Highest Biodiversity Importance and therefore poses a high risk for mining. If the presence and significance of these biodiversity features are confirmed during the site assessment, it is deemed likely that these areas could also be considered no-go areas from a biodiversity perspective due to the high impact and potential loss of irreplaceable habitat

### SPECIALIST INVESTIGATIONS REQUIRED

Study	Aspect
Terrestrial Biodiversity	Fauna, Flora, Avifauna
Freshwater Study	Aquatic Ecology, fish
Heritage and Palaeontological Study	Cultural, Heritage, Palaeontological resources
Surface and Groundwater Study	Impact on surface and groundwater
Visual Impact Assessment	Sense of place, landscape character, light pollution,

- ■Naledzi and specialists require access to prospecting right areas to conduct the above field investigations.
- The field investigations will allow Naledzi to determine evaluate the potential impacts and to produce well informed EIR and EMPR Reports for the application areas.
- ☐ The intention is to start field investigations in January 2021
- □ However due to spatial query, acess is still been sought to the bulk of the prospecting right areas from Lower Orange River Diamonds, bulk of sites only accessible from existing LOR mine roads..

# Water Use License Application

- □A WUL Application in terms of section 40 of the NWA will be submitted to the Department of Water and Sanitation: Orange Proto for Section 21 water uses (S21a, c, f, g, i) triggered by the diamond prospecting including an application for the relaxation of conditions imposed by GN704 (GG-20119), due to workings within the river flood line. Applicable water uses include:
- □S 21a Abstracting water from the Orange River
- □S21c Diversion of the water course during the bulk sampling, impeding natural flow
- □S21f Clarified water from the filtration process at the prospecting works will be released back to the river
- □S21g Stockpiles (topsoil, product/alluvial gravel, waste material) and temporary on-site disposal of waste
- □S21i Temporary altering of course of the water course, bulk sampling excavation and subsequent rehabilitation within the 1: 100 year flood line, release of clarified water back into the Orange River downstream of the workings
- □ Samara is still refining the prospecting method, designs and placement of site infrastructure before the WULA can be lodged.

### CONCLUSION

Samara Mining (Pty) Ltd values the environment and communities of the application areas and is therefore undertaking a high end environmental impact assessment process to:

- □ Gauge the likely environmental impacts of the project;
- □ Formulate mitigations measures with the assistance of multi disciplined specialist team, to avoid and or manage the potential significant impacts of the prospecting and bulk sampling activities along the Orange River.
- □ It is Samara's intention to work in a phased (small-scale) manner with concurrent rehabilitation to minimise potential impacts and risk of degradation of the affected focus areas.



# PRESENTATION BY: DR. SMA DYWILI SERVICE BEYOND EXPECTATION

16A SMITSDRIFT ROAD WEST END KIMBERLEY

10 INDUSTRIAL ROAD BARKLY WEST

NORTHERN CAPE

# CURRENT STATUS QUO-FOOD FOR THOUGHT

A number of young people in the Richtersveld area are without jobs and critically affected by poverty and crime.

Many are under the age of 20, with dependants, no social security system to tide them over, and with an even smaller chance of securing regular employment than the average person. In addition, there is little or no support offered to these young people and their families.

Skills development remains a critical part of job creation and poverty eradication.

# JOB CREATION

We are geared towards making a contribution in the following strategic objectives:

Samara will ensure 90% of employment will come from Koeboes, Sandrift, Lekkersing, Eksteenfontein and Sendilingsdrift. This will ensure local communities benefit maximally from job opportunities emanating from this prospecting right.

# SMALL ENTERPRISE DEVELOPMENT

As part of local development, Samara will avail land to local artisanal miners and support them with the necessary equipment to ensure their gradual growth and sustainable development.

Samara will also ensure gender balance in all opportunities created by this prospecting right. This will be done in partnership with local stakeholders to ensure a multi-disciplinary approach.

# AGRICULTURE

All agricultural land will remain protected for agricultural usage. Samara will also support local farmers through linking them to national and provincial institutions focusing on funding, skills development and training.

Samara will use the emerging farmers program as a tool to support and capacitate local farmers.

To ensure sustainability, Samara will set up a trust that will serve as a financial support system for agricultural development in the

# SOCIAL

Samara will partner with Provincial and Local Government to ensure;

- ☐ Upgrade of local clinics and schools
- ☐ Give support to schools transportation and feeding schemes
- ☐ Revive community policing forums
- ☐ Support all Victim Empowerment Programs in the area
- ☐ Revive sports, arts and culture programs and upgrade all sporting facilities
- ☐ Capacitate all victim support facilities at local police stations
- ☐ Emphasize the participation of youth and women in all opportunities emanating from this prospecting right

# SKILLS

DEVELOPMENT

Skills development remains critical in ensuring sustainable job creation. Samara will form a partnership with all the SETA's particularly the MQA and Agri-Seta to ensure proper skills development in the Richtersveld area.

One of our priority focus areas is the upgrade of the training centre in Alexanderbaai and establish a local trade test centre.

Our primary focus is to develop a state of

# CONCEPT

The strategy seeks to contribute maximally to the NDP vision that by;

"By 2030, South Africa will be a society in which all people Live in safe environments; Play a role in creating and maintaining the safe environment; feel and are safe from crime and violence and conditions that contribute to it; have equal access and recourse to high quality services when affected by crimeTandOviolerioneSet out by the White Paper on Safety and Security

# STRATEGIC PARTNERSHIPS

To ensure proper consultation, alignment and stakeholder relations a skills expo is scheduled to take place and will focus on the following:

- ☐ Develop an integrated skills development program
- ☐ To identify shortage of skills
- ☐ Design strategic focus areas and priorities
- ☐ Develop a coordination tool for all skills development programs in the mining sector.
- ☐ Design a stakeholder relations program aligned to the critical and scares skill development centre.

# Questions?



# **Our Contact Details**

Naledzi Environmental Consultants



Suite #320, Postnet Library Gardens Private Bag X9307, POLOKWANE, 0700



### **Marissa Botha**



015 296 3988



084 226 5584



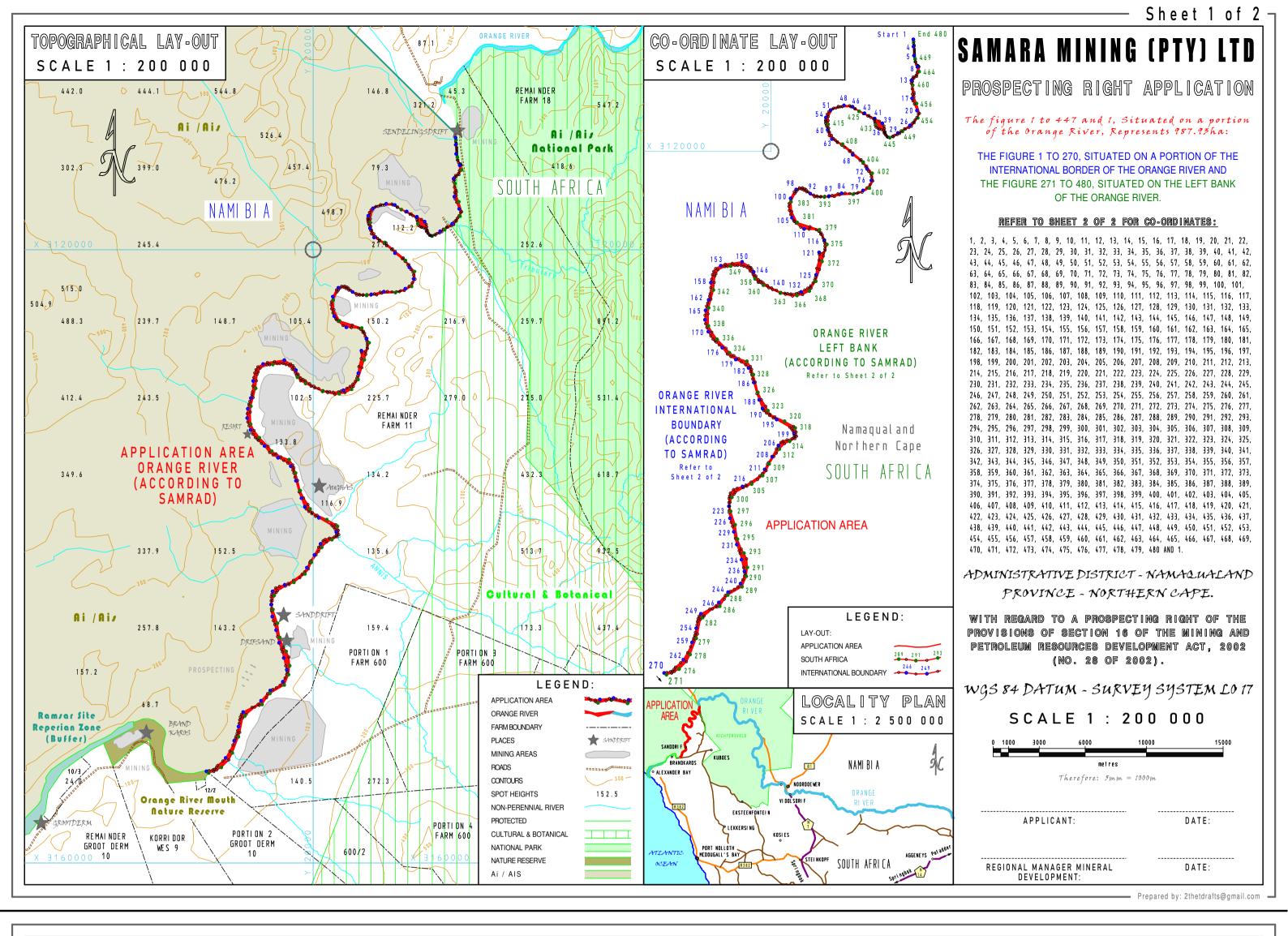
botham@naledzi.co.za



www.naledzi.co.za

# Way Forward

- □ Prepare, distribute and finalise the minutes of the meeting;
- Incorporate all commenting authority and public inputs received during the Scoping Phase in a consolidated Issues and Response Report and into the Final Scoping Reports;
- □ Submit the Final Scoping Reports to DMR: Springbok by no later than 11 January 2021;
- □DMR will notify the EAP within 43 days if the reports are accepted/rejected;
- □ Conduct public engagement meetings with communities in January 2021
- □ Commence with EIA Phase and specialist field investigations from January to February 2021
- □ Prepare EIR & EMPR Reports
- □ Conduct 2<sup>nd</sup> round of public engagements

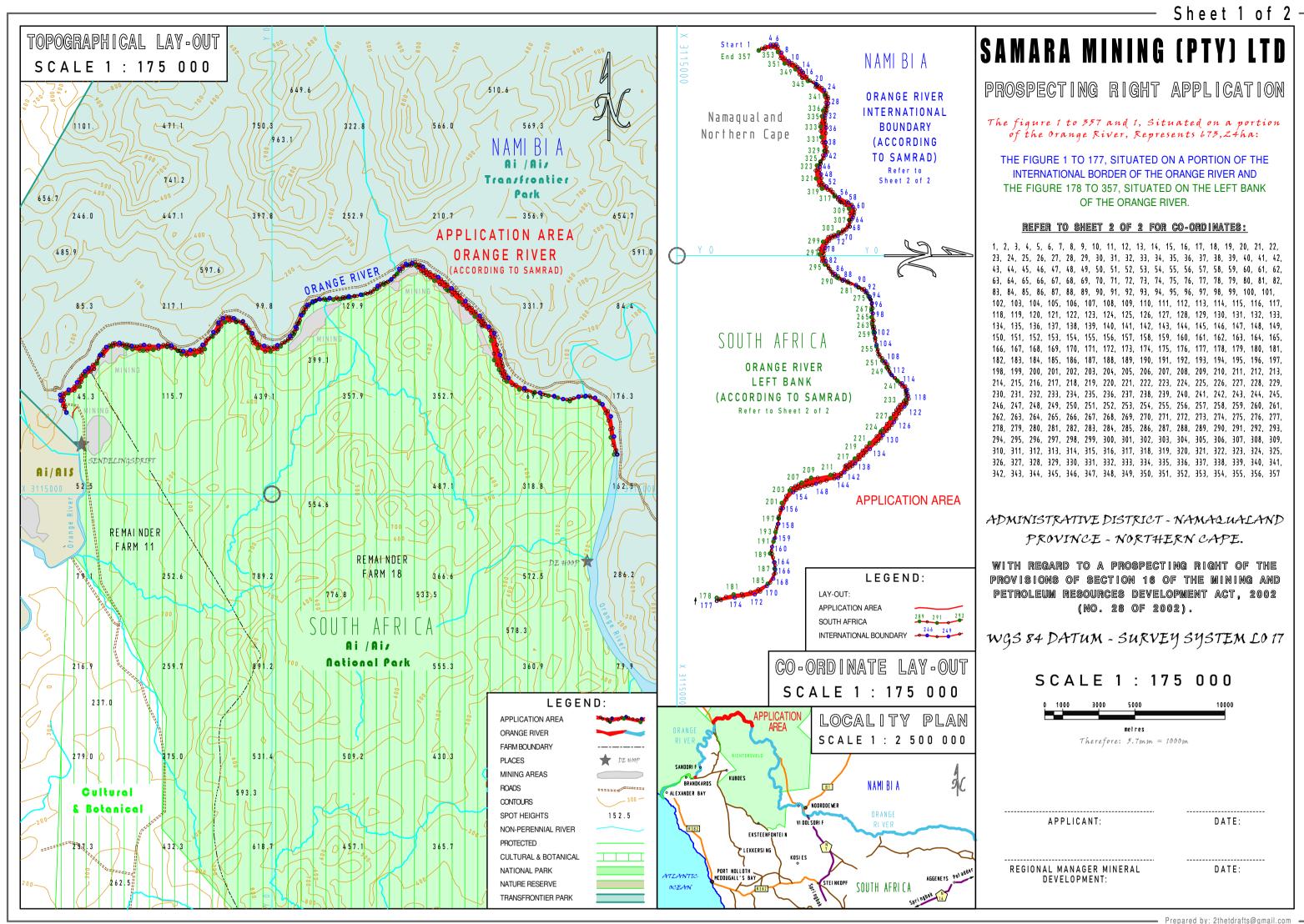


### WGS 84 DATUM - SURVEY SYSTEM LO 17

## GIS CO-ORDINATES:

### Sheet 2 of 2

																		1			_		
d	Lat	Long	ld L	a t	Long	l d	Lat	Long	l d	Lat	Long	l d	Lat	Long	l d	Lat	Long	l d	Lat	Long	l d	Lat	Lon
	-28.128544	16.891014	61 -28	. 183073	16.834484	121	-28.253818	16.828232	181	-28.319990	16.779224	241	-28.450643	16.773763	301	-28.396125	16.771366	361	-28.274776	16.794771	421	-28.168188	16.8424
2	-28.130891	16.891052	62 –28	. 185069	16.835026	122	-28.255018	16.828270	182	-28.321790	16.781155	242	-28.452020	16.771392	302	-28.395084	16.772179	362	-28.275773	16.797250	422	-28.168180	16.8437
5	-28.132587	16.891081	63 -28	.187196	16.836796	123	-28.258472	16.828066	183	-28.324108	16.782507	243	-28.453124	16.768903	303	-28.392396	16.777444	363	-28.277824	16.802402	423	-28.168159	16.849
	-28.132738	16.891092	64 -28	.189144	16.840364	124	-28.263230	16.826537	184	-28.325818	16.783172	244	-28.453737	16.767251	304	-28.391428	16.779938	364	-28.278551	16.805817	424	-28.169559	16.852
j	-28.138098	16.891387	65 -28	.190880	16.843416	125	-28.267053	16.826221	185	-28.328335	16.783864	245	-28.455576	16.765379	305	-28.390154	16.783120	365	-28.279571	16.810516	425	-28.170890	16.854
3	-28.141778	16.892138	66 –28	1.192071	16.845224	126	-28.268612	16.825732	186	-28.330346	16.784610	246	-28.459750	16.761109	306		16.787062	366	-28.279193	16.813509	426	-28.172344	16.857
'	-28.143277	16.892910	67 –28	. 194430	16.848400	127	-28.269987	16.825169	187	-28.336980	16.786632	247	-28.461778	16.759102	307	-28.385199	16.790458	367	-28.278735	16.817216	427	-28.173680	16.860
}	-28.144772	16.893677		.196456	16.850657	128	-28.271775	16.824157	188	-28.340597	16.788204		-28.463626	16.755015	308	-28.382263	16.792840		-28.276623	16.821663	428	-28.174517	16.862
)	-28.147946	16.893484		1.199815	16.855465		-28.273452	16.822550	189		16.790253		-28.466381	16.749157	309	-28.378346	16.794787		-28.274941	16.822924	429	-28.175437	16.864
0	-28.149597	16.892824		3.201394	16.857348		-28.274794	16.820672	190		16.790500		-28.467767	16.747891		-28.374027	16.797920		-28.270836	16.825992	430	-28.175723	16.865
1	-28.150699	16.890893		3.203649 3.204855	16.859295		-28.275923	16.818586 16.816226		-28.347004 -28.348420	16.791326		-28.469285	16.747161		-28.372012 -28.369553	16.799610		-28.263938	16.828540	431	-28.176792 -28.177719	16.865 16.865
3	-28.151853 -28.152728	16.889627		3.206212	16.861205		-28.277110 -28.277555	16.814702		-28.349836	16.795103		-28.471011 -28.473043	16.746423		-28.366454	16.805000		-28.259217 -28.256019	16.831206		-28.177719	16.865
4	-28.154421	16.889547		3.207639	16.862556		-28.278023	16.813076		-28.351342	16.797571		-28.474925	16.746013		-28.365040	16.808432		-28.252630	16.832317		-28.180244	16.866
5	-28.157685	16.890148		.209431	16.862969		-28.278212	16.809463		-28.352183	16.799781		-28.477302	16.745369		-28.363459	16.811940		-28.249195	16.833427		-28.180851	16.867
6	-28.160792	16.890335		.211563	16.863029		-28.277985	16.807146		-28.356733	16.808444		-28.479056	16.744972		-28.362104	16.813104		-28.246549	16.832011	436	-28.181249	16.868
7	-28.163270	16.890132		.213960	16.862106		-28.277813	16.805384		-28.357715			-28.480631	16.744361		-28.359569	16.812814		-28.243576	16.830429	437	-28.181336	16.868
8	-28.164717	16.890657		.215855	16.860089		-28.277293	16.802680		-28.358943	16.810552		-28.481800	16.743985		-28.357152	16.812170		-28.242409	16.829667	438	-28.181688	16.869
9	-28.166590	16.891623	79 –28	.217417	16.857504	139	-28.276050	16.799778	199	-28.360468	16.811362	259	-28.483253	16.743159	319	-28.356170	16.811092	379	-28.240538	16.828465	439	-28.181941	16.871
20	-28.170430	16.893329	80 -28	.218639	16.854317	140	-28.274690	16.796651	200	-28.361681	16.811577	260	-28.485780	16.742215	320	-28.353220	16.805041	380	-28.238713	16.822216	440	-28.183204	16.871
21	-28.172459	16.894225	81 -28	.219173	16.851602	141	-28.273239	16.793840	201	-28.362700	16.811282	261	-28.489278	16.740220	321	-28.350595	16.798646	381	-28.236234	16.813719	441	-28.183922	16.871
22	-28.174506	16.893189	82 –28	.219218	16.848664	142	-28.271487	16.790959	202	-28.363474	16.809984	262	-28.493380	16.737398	322	-28.349027	16.795460	382	-28.229715	16.810054	442	-28.184920	16.872
23	-28.175854	16.892116	83 –28	.218947	16.845589	143	-28.270707	16.789489	203	-28.364107	16.806706	263	-28.495153	16.735499	323	-28.346988	16.794044	383	-28.224062	16.809598	443	-28.186022	16.873
24	-28.177145	16.891113		.219098	16.843234		-28.269890	16.787923	204		16.803992		-28.497755	16.732055	324		16.792571	384		16.812168	444		16.874
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28	-28.182323	16.882809		3.220781	16.831947		-28.262581	16.782821		-28.374038	16.796766		-28.500810	16.726363	328		16.784365	388		16.818165	448		16.881
9 50	-28.183604 -28.184904	16.880674 16.878555	-	3.220908 3.220573	16.829442		-28.261617 -28.259329	16.781265		-28.377488 -28.378428	16.794271		-28.501206 -28.501207	16.724604		-28.322645 -28.320983	16.782546		-28.218220 -28.221183	16.819925		-28.182710 -28.181416	16.883
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52	-28.186110	16.875213		.219268	16.822447		-28.260644	16.765770		-28.383964	16.790168		-28.502263	16.726084	332		16.774695		-28.221278	16.829291	452		16.889
33	-28.185618	16.873582		.218228	16.821089		-28.261571	16.762900		-28.385243	16.788564		-28.501344	16.729555		-28.314464	16.771449		-28.221344	16.831786		-28.177667	16.891
54	-28.184479	16.872644		.217013	16.819722		-28.263215	16.759381		-28.388886	16.782733		-28.501330	16.729587		-28.312844	16.768520		-28.221226	16.834650		-28.174773	16.893
55	-28.183169	16.872182		.216354	16.818737		-28.264902	16.758099		-28.390736	16.779219		-28.500451	16.731422	335	-28.310105	16.766203		-28.221060	16.838426		-28.172136	16.895
56	-28.182869	16.872078	96 -28	.215777	16.817195	156	-28.266820	16.757257	216	-28.391531	16.777001	276	-28.498970	16.734517	336	-28.304942	16.760313	396	-28.220045	16.841830	456	-28.166260	16.893
57	-28.181018	16.871796	97 –28	.215803	16.815226	157	-28.269563	16.756648	217	-28.392489	16.773471	277	-28.494607	16.739501	337	-28.300687	16.756831	397	-28.219676	16.850910	457	-28.162394	16.891
8	-28.179504	16.871490	98 -28	.216786	16.812989	158	-28.271537	16.756238	218	-28.393315	16.771006	278	-28.490420	16.741883	338	-28.296983	16.754551	398	-28.219151	16.853603	458	-28.160621	16.891
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10	-28.176639	16.868341		.221991	16.809315		-28.278057	16.755680		-28.397147	16.768340		-28.478333	16.746882	340	-28.286385	16.754719	_	-28.216051	16.861691	460	-28.155527	16.890
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2	-28.173343	16.861464		.226816	16.808129		-28.281633	16.754687		-28.400965	16.767846		-28.468744	16.750240		-28.275874	16.757939		-28.207295	16.863602	462	-28.151344	16.891
13	-28.171960	16.858476		3.229132	16.808462		-28.283546	16.754006		-28.403178	16.767913		-28.467723	16.751289			16.758473	_	-28.203197	16.859960	463	-28.150298	16.893
14	-28.170723 -28.160250	16.855166		233462	16.809331		-28.285337	16.753255		-28.405749	16.768042		-28.463606 -28.462531	16.756892			16.758915		-28.200752 -28.100302	16.857626	464	-28.147528 -28.144668	16.894
·5 ·6	-28.169250 -28.168132	16.852398 16.850556		3.233462 3.234972	16.810210 16.811227		-28.287883 -28.290750	16.752633 16.752198	225	-28.406924 -28.410264	16.768098 16.768608		-28.462531 -28.462031	16.759942		-28.266361 -28.264042	16.759666 16.760997		-28.199302 -28.195328	16.856261 16.850778	465	-28.144668 -28.144240	16.894
F <b>0</b> F7	-28.166132	16.848662		3.235690	16.811723	167	-28.293362	16.752196	227		16.769338		-28.457992	16.764743	347	-28.262180	16.765455		-28.193923	16.849067	467	-28.143921	16.894
8	-28.167345	16.844899		3.236716	16.812936		-28.295705	16.752590	228		16.770260		-28.455447	16.767074	348	-28.262081	16.767252		-28.190151	16.843924	468	-28.141792	16.892
19	-28.167873	16.841111		.239012	16.816025		-28.297949	16.753421		-28.418223	16.771188		-28.450561	16.776582		-28.261845	16.769365		-28.188735	16.840532	469	-28.140133	16.892
0	-28.168949	16.838089		.240043	16.818273		-28.300410	16.754467	230	-28.422120	16.772100		-28.444437	16.779425	350	-28.261500	16.772241		-28.187707	16.839171		-28.139218	16.891
51	-28.170110	16.835954	111 -28		16.821594		-28.302941	16.756028			16.773130		-28.439229	16.780171	351	-28.261467	16.774043		-28.186750	16.837872		-28.138217	16.891
2	-28.171025	16.834763	112 -28	.240553	16.826403	172	-28.304901	16.757568	232	-28.429447	16.774638	292	-28.434140	16.779706	352	-28.261415	16.776253	412	-28.184993	16.836657	472	-28.137760	16.891
i3	-28.172484	16.833692	113 -28	.241491	16.827959	173	-28.305950	16.758931	233	-28.431058	16.775289	293	-28.430783	16.777918	353	-28.261986	16.778125	413	-28.183000	16.835273	473	-28.136928	16.891
54	-28.174432	16.832904	114 -28	.243136	16.829238	174	-28.306611	16.759687	234	-28.434624	16.776271	294	-28.428298	16.776133	354	-28.262638	16.780293	414	-28.180750	16.834785	474	-28.136332	16.891
55	-28.175883	16.832577	115 -28	.245425	16.830764		-28.308326	16.761634	235	-28.439256	16.777508	295	-28.422470	16.773567	355	-28.264703	16.782240	415	-28.178537	16.834318		-28.135451	16.891
6	-28.176697	16.832601	116 -28	.246905	16.831606	176	-28.309842	16.763694	236	-28.441549	16.778216	296	-28.414131	16.772096	356	-28.266900	16.784305	_	-28.176343	16.834388		-28.134719	16.891
57	-28.177829	16.832644	117 -28		16.831901		-28.313691	16.767085					-28.406143	16.769136	357	-28.268162	16.784970	-	-28.174034	16.834480		-28.134196	16.891
8	-28.179023	16.833127	118 -28		16.832041		-28.315150	16.769407			16.778108		-28.403142	16.768445	358	-28.269409	16.785646	_	-28.169460	16.837371	478	-28.132522	16.891
9	-28.179922	16.833497	119 -28		16.832019		-28.316822	16.772701			16.777036		-28.400823	16.768787	359	-28.271554	16.787744		-28.168935	16.839460		-28.131796	16.891
60	-28.181747	16.834044	120 -28	.254257	16.830893	180	-28.318356	16.776360	240	-28.448633	16.775576	300	-28.397901	16.769979	360	-28.273113	16.791156	420	-28.168528	16.841112	480	-28.129932	16.891



## GIS CO-ORDINATES:

d	Lat	Long	ld Lat	Long	ld Lat	Long	ld Lat	Long	Id La	t	Long	l d	Lat	Long	l d	Lat	Long	ld La	ı t	Long
1	-28.10851	16.88383	61 -28.06038	16.97389	121 -28.03478 1	7.08400			178 –28	8.12937	17.19332	238	-28.03490	17.07608	298	-28.07802	16.99617			
2	-28.10687	16.88285	62 -28.06060	16.97574	122 -28.03550	7.08519			179 –28	8.12770	17.19384	239	-28.03656	17.07386	299	-28.07623	16.99212			
3	-28.10509	16.88178	63 -28.06086	16.97688	123 -28.03697 1	7.08686			180 -28	8.12471	17.19255	240	-28.03763	17.07244	300	-28.07372	16.98935			
4	-28.10249	16.88075	64 -28.06129	16.97845	124 -28.03815	7.08913			181 –28	8.12089	17.19137		-28.03895	17.07069	301	-28.07218	16.98872			
5	-28.10123	16.88059	65 -28.06181	16.97944		7.09208				8.11687	17.19098		-28.03933	17.07018			16.98817			
6	-28.09961	16.88038	66 -28.06254	16.98080		7.09389					17.18994		-28.04041	17.06902		-28.06851	16.98676			
	-28.09884	16.88181	67 -28.06279	16.98348		7.09556				8.10860	17.18832	244	-28.04178	17.06756	304	-28.06630	16.98536			
8		16.88520	68 -28.06284 69 -28.06460	16.98358	128 -28.04312 1 129 -28.04432 1					8.10381	17.18530	245	-28.04204 -28.04243		305 306	-28.06379 -28.06319				
10		16.88994	70 -28.06593	16.98647		7.10134					17.17674			17.06542		-28.06315				
11		16.89093	71 -28.06716		131 -28.04714 1						17.17326			17.06422	308		16.97614			
12		16.89212	72 -28.06886	16.98884		7.10454				8.10266	17.16819		-28.04438	17.06303			16.97344			
13	-28.08903	16.89321	73 -28.07028	16.98942	133 -28.04993 1	7.10610			190 –28	8.10180	17.16437	250	-28.04574	17.06063	310	-28.06327	16.97332			
14	-28.08786	16.89442	74 -28.07166	16.98998	134 -28.05269 1	7.10920			191 –28	8.10100	17.16142	251	-28.04661	17.05918	311	-28.06542	16.97140			
15	-28.08681	16.89570	75 -28.07314	16.99156	135 -28.05462 1	7.11099			192 –28	8.10070	17.15981	252	-28.04789	17.05702	312	-28.06699	16.96997			
16	-28.08618	16.89648	76 -28.07452	16.99302	136 -28.05597 1	7.11281			193 –28	8.10002	17.15612	253	-28.04870	17.05567	313	-28.06706	16.96993			
17		16.89885	77 -28.07509		137 -28.05796						17.15450	254	-28.04904			-28.06773				
18		16.90109	78 -28.07515			7.11730				8.09928	17.15312	255	-28.04952	17.05111			16.96943			
19		16.90210	79 -28.07551	16.99733		7.11880				8.09886	17.15141		-28.05010	17.04794			16.96825			
20	-28.07980 -28.07905	16.90279	80 -28.07593 81 -28.07546	16.99937		7.11956 7.12055				8.09854	17.14824	257 258	-28.05033 -28.05069	17.04656 17.04448			16.96647			
22	-28.07905	16.90343	82 -28.07479	17.00133		7.12033				8.09767	17.14724	258	-28.05088	17.04448			16.96276			
23		16.90511	83 -28.07374			7.12443					17.14352	260		17.04355	320		16.96028			
24		16.90644	84 -28.07294			7.12553					17.13964		-28.05127			-28.07970				
25	-28.07473		85 -28.07159		145 -28.07063						17.13563		-28.05143			-28.08002				
26	-28.07382		86 -28.07025	17.01022		7.12704				8.09291	17.13256	263	-28.05166	17.03865			16.94901			
27	-28.07357	16.91125	87 -28.06878	17.01141	147 -28.07756 1	7.12797			204 –28	8.09210	17.13117	264	-28.05187	17.03736	324	-28.07764	16.94700			
28	-28.07359	16.91390	88 -28.06580	17.01341	148 -28.07970 1	7.12879			205 -28	8.09011	17.13000	265	-28.05196	17.03470	325	-28.07754	16.94682			
29	-28.07392	16.91580	89 -28.06388	17.01427	149 -28.08180 1	7.12952			206 –28	8.08850	17.12906	266	-28.05205	17.03170	326	-28.07739	16.94649			
30		16.91807	90 -28.05969	17.01644		7.12996				8.08695	17.12818	267	-28.05200	17.03038		-28.07634	16.94318			
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32	-28.07512		92 -28.05466			7.13149					17.12544		-28.05187				16.94075			
33	-28.07519 -28.07527	16.92378	93 -28.05393 94 -28.05290	17.02123		7.13243 7.13359				8.07245	17.12528			17.02719 17.02710		-28.07667 -28.07704	16.93595			
		16.92578			155 -28.09447						17.12379		-28.05257			-28.07746				
36	-28.07461		96 -28.05171		156 -28.09624						17.12265		-28.05273			-28.07748				
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38	-28.07495		98 -28.05121			7.15139					17.11817		-28.05352			-28.07682				
39	-28.07496	16.93624	99 -28.05088	17.03658	159 -28.10020 1	7.15939			216 -28	8.06281	17.11664	276	-28.05463	17.02107	336	-28.07616	16.91804			
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43	-28.07592		103 -28.05004	17.04645	163 -28.10117 1						17.10763			17.01788		-28.07526				
44	-28.07744		104 -28.04951	17.05013	164 -28.10042 1						17.10574		-28.05852			-28.07542				
45 46	-28.07753 -28.07775		105 -28.04880 106 -28.04796	17.05286 17.05563	165 -28.10010 1 166 -28.10007 1						17.10180			17.01781		-28.08002 -28.07983				
47			107 -28.04658	17.05782	167 -28.09995						17.09886		-28.06248			-28.07983				
48	-28.07724		108 -28.04509		168 -28.10104						17.09771		-28.06352			-28.08379				
49	-28.07703				169 -28.10258						17.09483		-28.06419			-28.08664				
50	-28.07676		110 -28.04338		170 -28.10428 1						17.09170			17.01420	-	-28.08672				
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53		16.96266	113 -28.04025		173 -28.11622 1						17.08564			17.01236		-28.09305				
54	-28.07139		114 -28.03663		174 -28.12040 1						17.08407		-28.07017			-28.09545				
55	-28.07019		115 -28.03504		175 -28.12727 1						17.08216		-28.07139			-28.09753				
56	-28.06817		116 -28.03415		176 -28.12935 1						17.08113		-28.07246				16.88493			
57 58		16.96933	117 -28.03393 118 -28.03362		177 -28.12938 1	7.19004					17.07862		-28.07350 -28.07537	17.00719		-28.10029 -28.10234				
59	-28.06357 -28.06195		119 -28.03325								17.07634		-28.07537 -28.07691			-28.10234				
	-28.06127		120 -28.03426								17.07631		-28.07796			-28.10843				
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