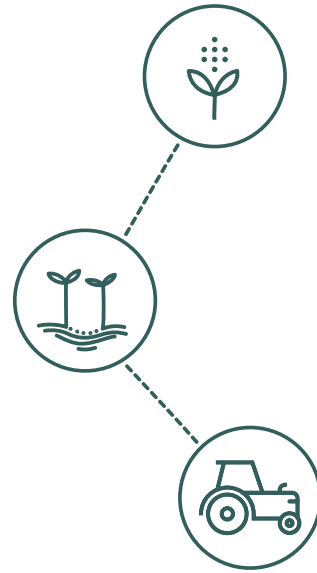




WE ARE KROPZ — ONS IS KROPZ

Kropz is an explorer, mine developer and miner of fertilizer feed minerals, striving to develop a vertically integrated fertilizer manufacturing capability producing a progressive range of plant nutrients for the sub-Saharan African agricultural industry.

Kropz in 'n eksplorieerder, myn ontwikkelaar en myner van kunsmis verwante minerale. Kropz streef daarna om 'n vertikale geïntegreerde kunsmis vervaardigings kapasiteit te ontwikkel vir die vervaardiging van 'n progressiewe reeks plant voedingstowwe vir die sub Sahara landbou industrie.



OUR CORE VALUES / ONS KERNWAARDES



PEOPLE

We are dedicated to creating sustainable employment opportunities and nurturing talent from our local communities.

MENSE

Ons is daaraan toegewy om volhoubare werkseleenthede te skep en plaaslike talent uit ons gemeenskappe te ontwikkel.



COMMUNITY

We are focused on understanding the long-term needs of the communities we operate in, and investing in their socio-economic upliftment.

GEMEENSKAP

Ons is daarop toegespits om die langtermynbehoefte van ons gemeenskappe waarin ons werksaam is, te verstaan en om in hulle sosio-ekonomiese opheffing te belê.



ENVIRONMENT

We always take a proactive long-term approach to every aspect of our work, particularly where it impacts nature and the environment.

OMGEWING

Ons langtermynbenadering tot elke aspek van ons werk is altyd proaktief, veral waar dit 'n uitwerking het op die natuur en die omgewing.

“The challenge is to care about every one and everything at the same time.”

“Die uitdaging is om terselfdertyd om te gee oor almal en alles.”

– MIKE NUNN

OUR HEARTFELT ETHOS

At the core of everything we do is this simple principle: Nothing wasted.

But what does that mean? It means we're focused on doing the right things, the right way. It means we keep our values at the forefront of what we're doing, so we can make sure that no resource or opportunity goes to waste.

It means working efficiently, expediently and always doing things to the best of our abilities.

It means we leave whatever we find better than when we found it.

It's more than just a way of working or a business strategy, it's the measure that we judge every single action and thought against.

ONS OPREGTE ETOS

Aan die kern van alles wat ons doen, lê die klinkklare beginsel: Niks word vermors nie.

Maar wat beteken dit? Dit beteken ons is toegespits daarop om die regte dinge op die regte manier te doen. Dit beteken ons hou ons waardes op die voorpunt van dit wat ons doen sodat ons kan seker maak dat geen hulpbron of geleentheid verlore gaan nie.

Dit beteken om doelmatig en doeltreffend te werk en altyd dinge na die beste van ons vermoë te doen.

Dit beteken ons laat enigiets in 'n beter toestand agter as waarin ons dit gekry het.

Dit is méér as net 'n werkwyse of 'n besigheidstrategie; dit is die maatstaf waarmee ons elke enkele aksie en gedagte meet.

OUR MISSION

Our mission is to set a new standard in quality fertilizer production and distribution that will meaningfully contribute towards feeding our world for generations to come.

We're committed to operating with integrity and with an innovative, transparent approach centred on our core values – to uplift our people, to develop their communities and to protect the environment.

ONS MISSIE

Ons missie is om 'n nuwe standaard daar te stel vir die produksie en verspreiding van topgehalte kunsmis om sodoende 'n betekenisvolle bydrae te lewer tot die voedsel van ons wêreld vir ons nageslag.

Ons is daartoe verbind om ons onderneming met integriteit en met 'n innoverende en deursigtige benadering te bedryf – toegespits op ons kernwaardes – om ons mense op te hef, hulle gemeenskappe te ontwikkel en die omgewing te beskerm.



ELANDSFONTEIN

THE AREA
DIE GEBIED

(A)

LANGEBAAAN LAGOON

The Langebaan Lagoon is 12km to the west of the deposit. The protection and preservation of the lagoon is of the utmost importance and will be ensured before, during and after operations.

LANGEBAAAN-STRANDMEER

Die Langebaan-strandmeer is sowat 12km wes van die neerslag geleë. Die beskerming en bewaring van die strandmeer is uiters belangrik en dit word verseker voor, gedurende en na werksaamhede.

(B)

ELANDSFONTEIN FARM

Elandsfontein is an expanse of almost 5,000ha of agricultural land on the West Coast of South Africa. It contains the Elandsfontein phosphate deposit, the largest sedimentary phosphate deposit in South Africa.

ELANDSFONTEIN-PLAAS

Elandsfontein is 'n uitgestrekte gebied van sowat 5,000ha landbougrond in private besit aan die Weskus van Suid-Afrika. Dit sluit die Elandsfontein fosfaatneerslag in – die grootste sedimentêre fosfaatneerslag in Suid-Afrika.

(C)

SURROUNDING COMMUNITIES

Neighbouring local communities from the Saldanha Bay Municipality include Hopefield, Langebaan, Vredenburg and Saldanha.

OMRINGENDE GEMEENSKAPPE

Naburige plaaslike gemeenskappe van die Saldanhabaai-munisipaliteit sluit in Hopefield, Langebaan, Vredenburg en Saldanha.



KEY / SLEUTEL

- FARM / PLAAS
- MINING RIGHT AREA / MYNREG-GEBIED
- PHOSPHATE RESOURCE / FOSFAATHULPBRON

NORTH / NOORD

15km

GROUNDWATER FLOW
GRONDWATERVLOEI

(A)

ELANDSFONTEIN AQUIFER

An aquifer is a geological formation consisting of sandy sediments that hold water or allow water to move through it. At Elandsfontein, the aquifer lies approximately 20m below the surface.

ELANDSFONTEIN-AKWIFEER

'n Akwifoor is 'n geologiese formasie wat bestaan uit sanderige sedimente wat water kan berg of water kan deurlaat. By Elandsfontein lê die akwifoor sowat 20m onder die oppervlak.

(B)

WATERSHED

A watershed exists approximately 10km to the east of the Elandsfontein area, which directs the water in the Elandsfontein aquifer in a south westerly direction towards the Langebaan Lagoon.

WATERSKEIDING

'n Waterskeiding bestaan sowat 10km oos van die Elandsfontein-gebied en lei die water in die Elandsfontein-akwifoor in 'n suidwestelike rigting na die Langebaan-strandmeer toe.



KEY / SLEUTEL

- FARM / PLAAS
- MINING RIGHT AREA / MYNREG-GEBIED
- PHOSPHATE RESOURCE / FOSFAATHULPBRON
- GROUNDWATER FLOW / GRONDWATER VLOEI

NORTH / NOORD

15km

BEFORE OPERATIONS / VOOR WERKSAAMHEDE

AREA OF OPERATION
WERKSAAMHEIDSGEBIED

(A)

ELANDSFONTEIN FARM

Elandsfontein is home to a thriving natural ecosystem comprised of Saldanha Flats Strandveld, Langebaan Dune Strandveld and a growing wildlife population including eland, kudu, gemsbok, duiker, ostrich, zebra and bontebok.

ELANDSFONTEIN-PLAAS

Elandsfontein is die tuiste van 'n florerende natuurlike ekosistelsel bestaande uit die Saldanhlavlake-strandveld, Langebaanduine-strandveld en 'n groeiende natuurlewebevolking wat elande, koedoes, gemsbokke, duikers, volstruise, sebras en bontebokke insluit.

(B)

ELANDSFONTEIN DEPOSIT

Operations began with the exploration and development of the Elandsfontein sedimentary phosphate deposit. The operation will be limited to a fenced off area of 500ha. At any time, the open area of the mine excavation will be less than 60ha.

ELANDSFONTEIN-NEERSLAG

Werksaamhede het begin met die eksplorasi6 en ontwikkeling van die Elandsfontein sediment6re fosfaat-neerslag. Die werksaamhede sal 'n beperkte area binne 'n afgebakende gebied van 500ha versteur. Die oop gebied van die mynuitgraving sal te enige tyd beperk wees tot minder as 60ha.

(C)

ELANDSFONTEIN FOSSIL AREA

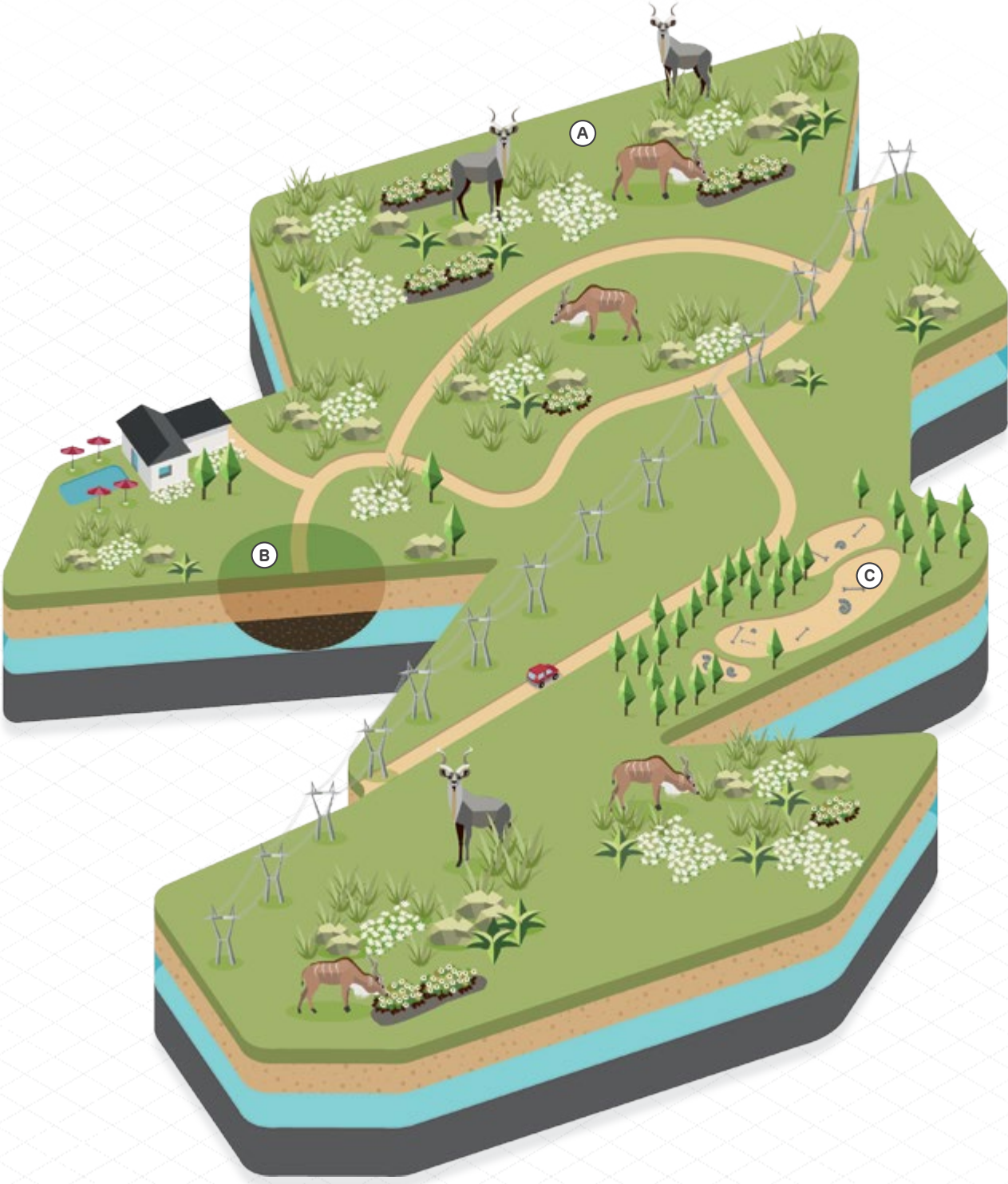
The dune fields, 3km to the east of the deposit, have been declared a Provincial Heritage Site by the Western Cape Government.

ELANDSFONTEIN-FOSSIELGEBIED

Die Wes-Kaapse Regering het die duineveld sowat 3km oos van die fosfaatneerslag as 'n provinsiale erfenisgebied verklaar.

KEY / SLEUTEL

- ALIEN VEGETATION / INDRINGER-PLANTEGROEI
- FOSSILS / FOSSIELE
- PHOSPHATE RESOURCE / FOSFAATHULPBRON
- POWERLINES / KRAGLYNE
- 4x4 TRACKS / 4x4-PAAIE



DURING OPERATIONS / GEDURENDE WERKSAAMHEDE

AREA OF OPERATION WERKSAAMHEIDSGEBIED

- (A) THE PLANT**
The 500ha operations area will contain the excavation area, the plant, the softs stockpile and the office.

UITGRAWINGSGBIED
Die werksaamheidsgebied van 500ha sal die uitgrawingsgebied, die bogronduitskothoop, die prosesseringsaanleg en die administrasiekantoor bevat.
- (B) THE SOFTS STOCKPILE**
The overburden that is removed from the mining area for the early production period, will be deposited on the softs stockpile.

DIE BOGRONDUITSKOTHOOP
Die bogrond wat weggeneem word uit die myn area gedurende die aanvanklike produksie fase, sal oorgehou word in die bogronduitskothoop.
- (C) INFRASTRUCTURE**
The operation will be accessed via a newly developed mine access road running 13.5km south from the R45. New power lines have been erected to connect the operation to the Eskom grid. Water lines have been laid to connect the operation to the district municipality's water supply.

INFRASTRUKTUUR
Toegang tot die myn geskied via 'n nuutontwikkelde toegangspad, 13.5km suid van die R45. Nuwe kragdrade is opgerig om die myn met die Eskom-netwerk te verbind. Water word voorsien deur 'n waterpypleiding wat die myn met die munisipale distrikswatertoevoer verbind.



THE PROCESSING PLANT DIE PROSESSERINGSAAANLEG

- (A) EMPLOYMENT, UP-SKILLING AND CARE**
Up to 1,100 people have been employed during the construction phase of the project with nearly 50% local employment. Over 450 people will be employed as members of the Elandsfontein operational workforce.

WERKVERSKAFFING, INDIENSOPLEIDING EN SORG
Tot 1,100 mense was gedurende die konstruksiefase van die projek in diens met amper 50% plaaslike werkverskaffing. Ongeveer 450 mense sal as deel van die Elandsfontein operasionele werksmag in diens geneem word.
- (B) FLOTATION COLUMNS**
Silica sand and phosphate are separated using a method called flotation. Air bubbles are introduced to large columns, and the silica grains attach to the bubbles, which 'float' over the edge of the columns, leaving behind the phosphate in the slurry.

FLOTASIEKOLOMME
Silika sand en fosfaat word geskei deur 'n proses van flotasië. Lugborrels word in groot kolomme bygevoeg en die silika korrels heg vas aan die borrels, wat "floteer" oor die rand van die kolomme, wat die fosfaat laat agterbly in die slik.
- (C) OFFICE**
The mine offices and access road will be left behind after mine closure to serve as a tourist centre, allowing access to the fossil area and the Elandsfontein Nature Reserve.

KANTOOR
Die mynkantore en toegangspad sal na die sluiting van die myn agter gelaat word as 'n toeristesentrum wat toegang sal bied tot die fossielgebied en die beplande Elandsfontein Natuurrreservaat.
- (D) CONCENTRATE STORAGE**
Final phosphate concentrate is stored in a closed shed.

KONSENTRAATBERGING
Die uiteindelijke fosfaatkonsentraat word in 'n geslote pakhuis gestoor.
- (E) WATER STORAGE**
Water on site is stored in tanks and in lined water dams.

WATERBERGING
Water op die terrein word in tenke en in uitgevoerde waterdamme gestoor.



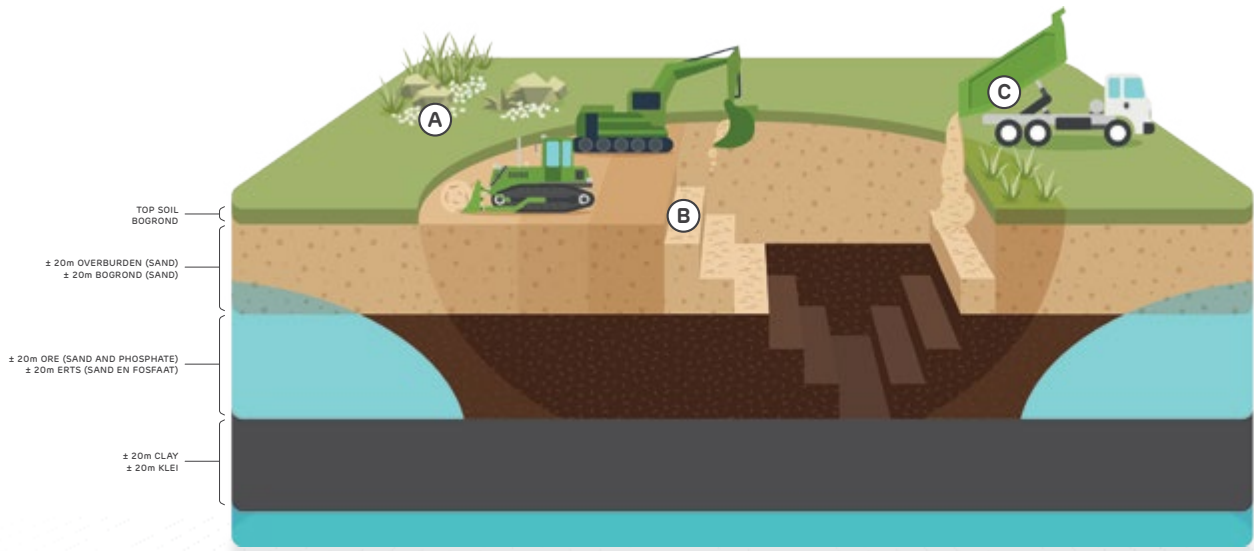
THE MINING AREA
DIE MYNGEBIED

A carefully considered mining process, which can be described as roll-over mining, has been designed to allow for rehabilitation of the land while mining is in progress. Rehabilitation will begin 25 months after the first ore has been treated.

This method ensures that there is reduced impact on the visual landscape over the course of the project and that the vegetation that is disturbed will be re-established as quickly as possible.

’n Sorgvuldig beplande ontginningsproses wat beskryf kan word as oor-rol myn metode maak voorsiening vir die rehabilitasie van die area tydens die werksaamhede. Rehabilitasie sal 25 maande nadat die eerste erfs verwerk is aanvang neem.

Hierdie metode verseker dat daar gedurende die verloop van die projek ’n verminderde uitwerking is op die visuele landskap, en dat die plantegroei wat versteur word so gou moontlik hervestig word.



A Before mining begins a search and rescue for any protected plant species is conducted. Any plants recovered are removed to a nearby nursery for further propagation. Voordat ontginning ’n aanvang neem, word ’n soek-en-redding vir alle beskermde plantspesies uitgevoer. Enige plante wat vir hervestiging bewaar moet word, word vir kweking verwyder na ’n nabygeleë kwekery.	B The mine is excavated in 50m wide strips. Die myn word ontgin in 50m wye stroke.	C As soon as a strip is completed, overburden removed from the new strip is placed back into a previously mined strip, including the careful replacement of the vegetative top layer of soil. This process allows the land to recover during operations over the course of the project, with seedlings establishing five months after placement. So gou as wat ’n strook voltooi is, word die bogrond wat van die nuwe strook verwyder is, teruggeplaas in ’n vorige gemynde strook, wat die terugplasing van die vegetatiewe bolaag van die grond insluit. Hierdie proses maak voorsiening daarvoor dat die grond gedurende die verloop van die projek herstel met saailinge wat vyf maande na die terugplasing van die bogrond begin groei.
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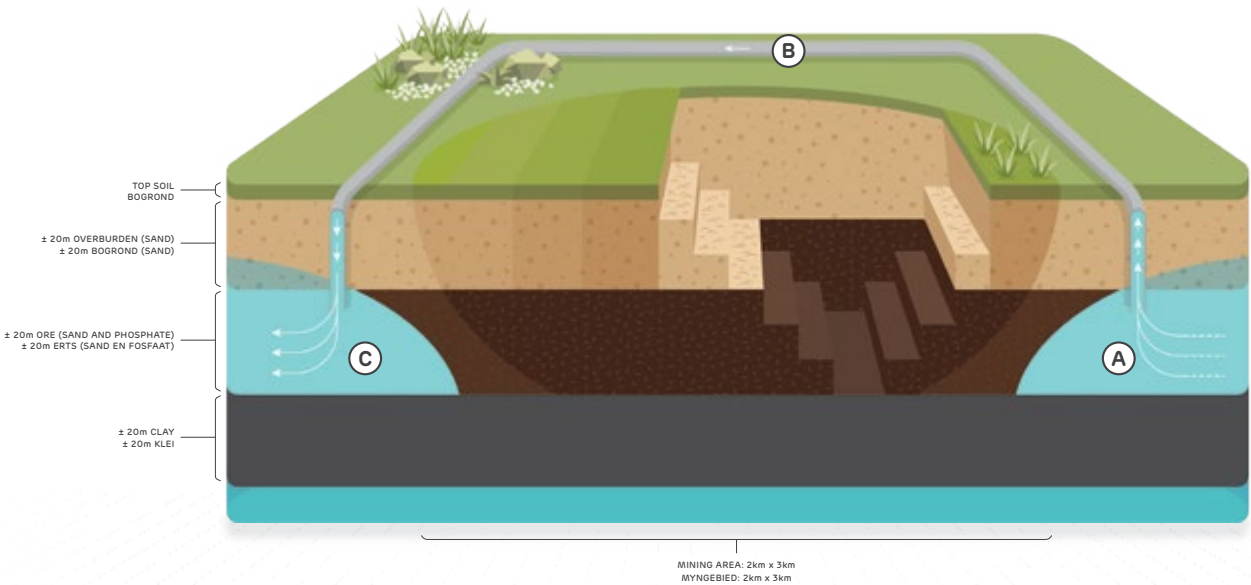
PROTECTING THE AQUIFER AND THE LAGOON
BESKERMING VAN DIE AKWIFEER EN DIE STRANDMEER

Kropz is working to eliminate any negative impacts from the operation on groundwater quality and availability by developing a number of groundwater monitoring programmes that will ensure the protection and preservation of the Langebaan Lagoon.

A borehole dewatering and recharge system will ensure that the fresh ground water flowing towards the lagoon will be not be affected in any way.

Kropz werk daaraan om enige negatiewe uitwerking wat die werksaamhede op die kwaliteit van die grondwater het uit te skakel. Dit word gedoen met behulp van verskeie grondwater-monitorprojekte wat die beskerming en bewaring van die Langebaan-strandmeer sal verseker.

’n Boorgatontwaterings-en hervullingstelsel sal verseker dat die vars grondwatervloei na die strandmeer nie op enige wyse beïnvloed sal word nie.



A Water is pumped up from underground before it reaches the deposit. This ensures that the mining area remains dry and the water does not come into contact with any mining activities. Ondergrondse water word opwaarts gepomp voordat dit die neerslag bereik. Dit verseker dat die myngebied droog bly en dat die water nie in aanraking kom met enige mynaktiwiteite nie.	B The water is transported above ground via a closed dedicated pipeline to boreholes beyond the deposit, ensuring the water chemistry remains unchanged. Die water word bogronds vervoer via ’n geslote pylyn na boorgate oorkant die neerslag. Dit verseker dat die chemiese samestelling van die water onveranderd bly.	C Water is pumped back into the ground to restore the water table to its natural level, with no impact on the quality or the quantity of the groundwater flowing into the Langebaan Lagoon. Water word in die grond terug gepomp om die watertafel na sy natuurlike vlak te herstel, met geen uitwerking op die kwaliteit of volume van die grondwater wat in die Langebaan-strandmeer invloei nie.
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RELATIVE VOLUMES OF THE MINING PROCESS
RELATIEWE VOLUMES VAN DIE ONTGINNINGSPROSES

(A)

Overburden (sand) and ore is removed to a depth of 60m below natural ground level.

Boggrond (sand) en erts word verwyder tot 'n diepte van 60m onder natuurlike grondvlak.

(B)

The overburden that is removed from the mining area for the early production period, will be deposited on the softs stockpile.

Die boggrond wat weggeneem word uit die myn area gedurende die aanvanklike produksie fase, sal oorgehou word in die boggronduitskothoop.

(C)

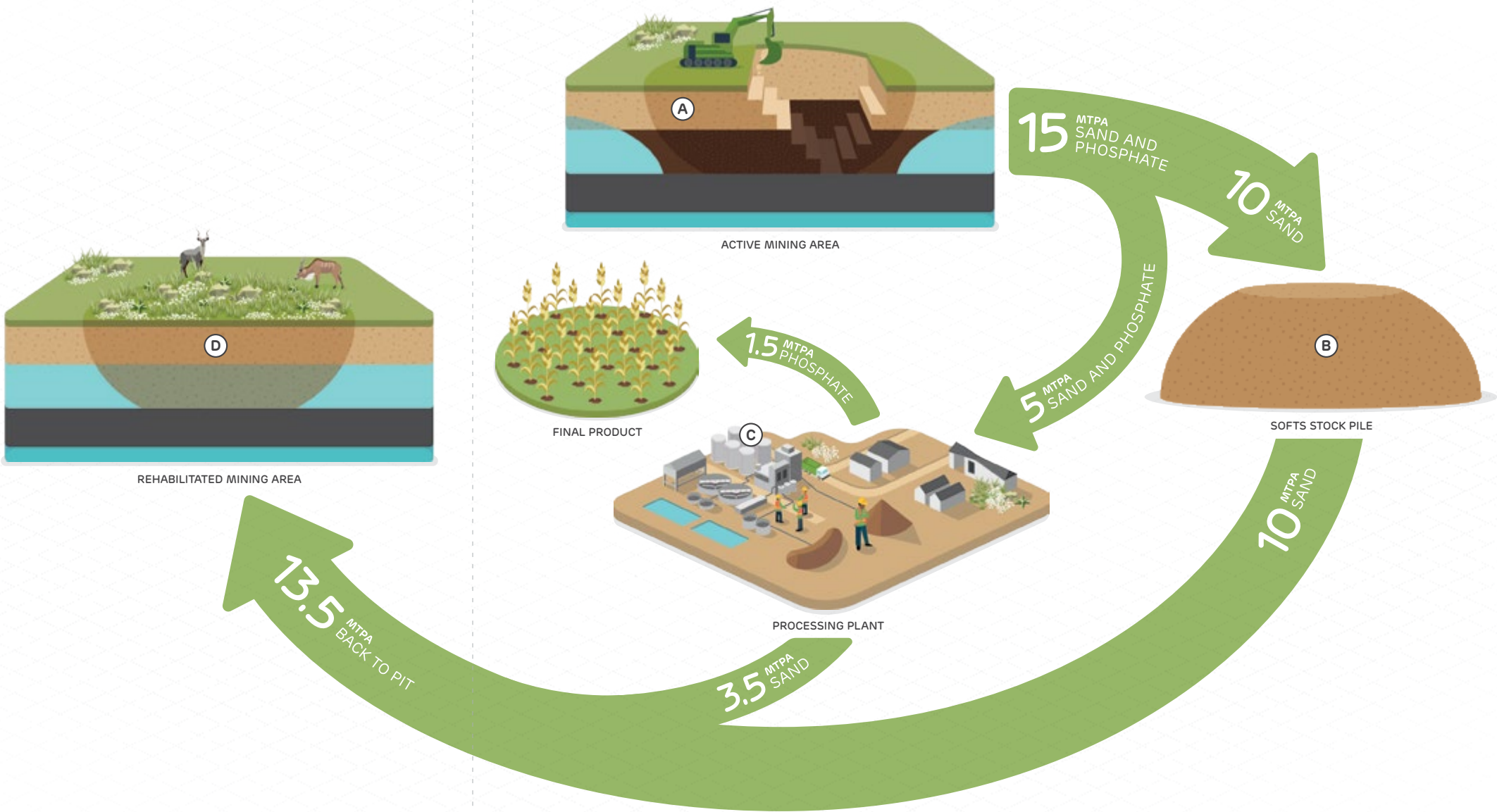
The ore is processed to recover the phosphate. Approximately 25% of plant feed is recovered as concentrate.

Die erts word geprosesseer om die fosfaat te herwin. Ongeveer 25% van die aanleg se toevoer word herwin as konsentraat.

(D)

The remaining sand, having naturally expanded in the process, will be returned to fill the excavation pit.

Die oorblywende sand wat in die proses van nature uitsit, sal teruggeneem word na die uitgrawingsput.



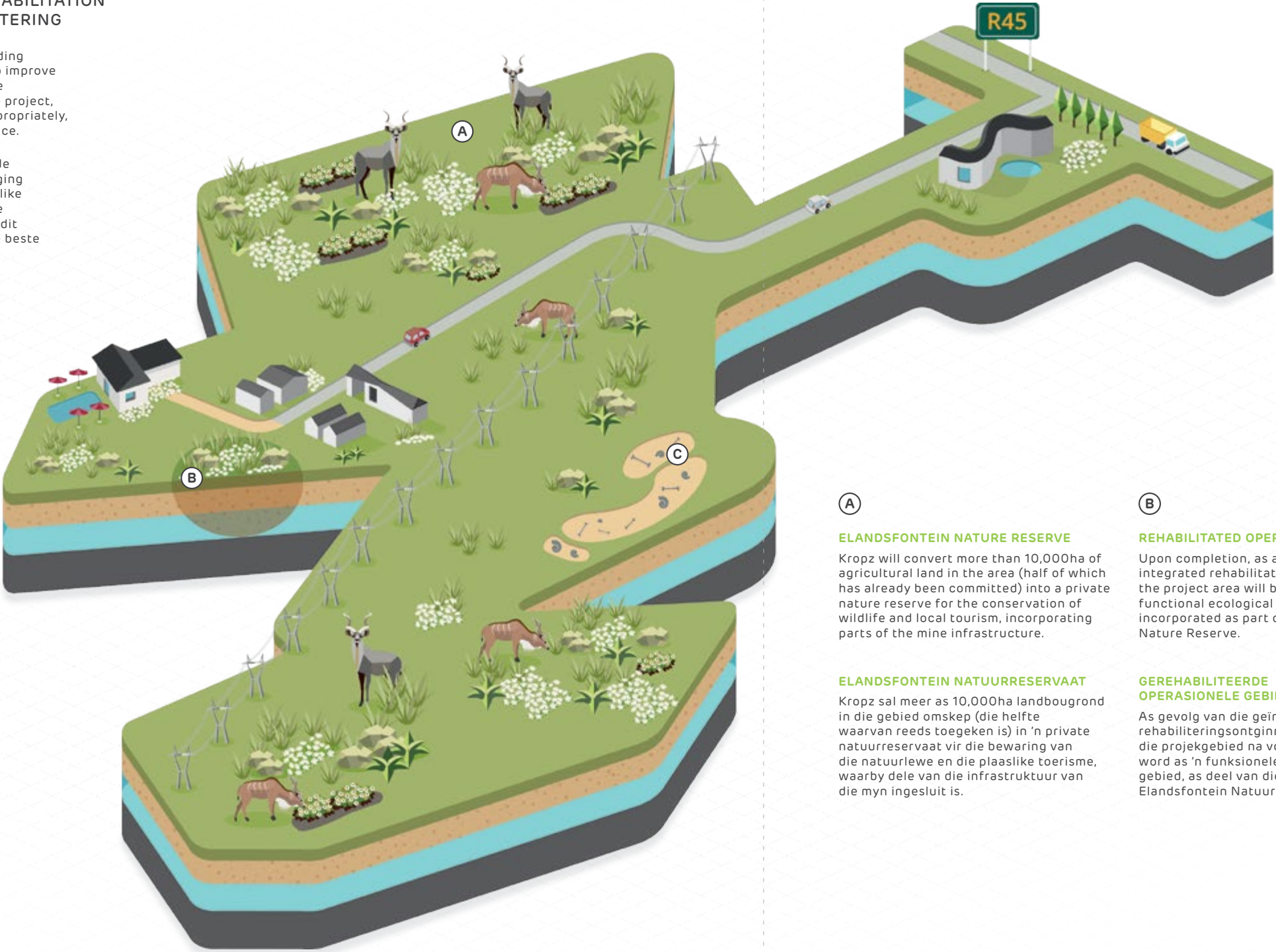
UNIT OF MEASUREMENT = **MTPA (MILLION TONNES PER ANNUM)**
METINGSEENHEID = **MTPJ (MILJOEN TON PER JAAR)**

AFTER OPERATIONS / GEDURENDE WERKSAAMHEDE

ENVIRONMENTAL REHABILITATION
OMGEWINGSREHABILITERING

Kropz has partnered with leading environmental consultants to improve our understanding of possible environmental impacts of the project, and how to mitigate them appropriately, using the best available science.

Kropz wend saam met leidende omgewingskonsultante 'n poging aan om ons begrip van moontlike omgewingsuitwerking van die projek te verhoog en hoe ons dit toepaslik kan bestuur met die beste beskikbare wetenskap.



KEY / SLEUTEL

- FOSSILS / FOSSIELE
- POWERLINES / KRAGLYNE
- TARRED ROAD / TEERPAD
- 4x4 TRACKS / 4x4-PAAIE

(A)

ELANDSFONTEIN NATURE RESERVE

Kropz will convert more than 10,000ha of agricultural land in the area (half of which has already been committed) into a private nature reserve for the conservation of wildlife and local tourism, incorporating parts of the mine infrastructure.

ELANDSFONTEIN NATUURRESERVAAT

Kropz sal meer as 10,000ha landbougrond in die gebied omskep (die helfte waarvan reeds toegeken is) in 'n private natuurreservaat vir die bewaring van die natuurlewe en die plaaslike toerisme, waarby dele van die infrastruktuur van die myn ingesluit is.

(B)

REHABILITATED OPERATION AREA

Upon completion, as a result of the integrated rehabilitation mining process, the project area will be returned to a functional ecological state that can be incorporated as part of the Elandsfontein Nature Reserve.

GEREHABILITEERDE
OPERASIONELE GEBIED

As gevolg van die geïntegreerde rehabiliteringsontginningsprosesse, sal die projekgebied na voltooiing herstel word as 'n funksionele ekologiese gebied, as deel van die beplande Elandsfontein Natuurreservaat.

(C)

PALEO RESEARCH AND TOURISM

Kropz, in collaboration with Heritage Western Cape, has declared the Elandsfontein Dune Fields a Provincial Heritage site. Long term planning includes the establishment of educational, employment and commercial opportunities for local communities.

PALEO-NAVORSING EN TOERISME

In samewerking met Erfenis Wes-Kaap het Kropz die Elandsfontein-duineveld as 'n provinsiale erfenisgebied verklaar. Langtermynbeplanning sluit in die vestiging van opvoedkundige werkverskaffing en kommersiële geleenthede vir plaaslike gemeenskappe.



YOUR QUESTIONS ANSWERED

We have taken the questions we have received over the last three years at various public participation meetings and here are the answers.

OVERVIEW

Who is Kropz?

Kropz is an explorer, mine developer and miner of fertilizer feed minerals, striving to develop a vertically integrated fertilizer manufacturing capability producing a progressive range of plant nutrients for the sub-Saharan African agricultural industry.

So, what's with the heart?

The use of the green heart in the Kropz logo represents Kropz's constant commitment to its caring approach towards its people and communities, as well as its consideration for the environments in which it operates.

How is Kropz linked to Elandsfontein?

Kropz is the majority shareholder, major funder and debt provider for the development of the Elandsfontein phosphate project. Kropz's commitment to the Elandsfontein project is driven by its goal to access world-class fertilizer feedstock materials, of which phosphate is the most sought after.

The Kropz management team, who are developing the Elandsfontein project, are committed to world-class environmental standards across every aspect of the project. To this end they have embraced the goal of Elandsfontein becoming the world's first truly green mining operation.

Why mine at Elandsfontein?

Elandsfontein is South Africa's largest known sedimentary phosphate deposit, and the second largest after the igneous Phalaborwa deposit. The Phalaborwa deposit is not able to support South Africa and the sub-continent's phosphate needs, ultimately threatening food security.

Why is phosphate so important?

Phosphates are a naturally occurring salt form of phosphorus. Plants need phosphorus in order to grow. Phosphate fertilizers help to increase crop yields so that more food can be produced from less land.

How much money is Kropz investing into Elandsfontein?

Kropz is investing R1.35 billion into the development of the Elandsfontein project, and every effort is being made to maximise benefits directly to local businesses in the Saldanha Bay Municipality.

Do we need to mine phosphate in South Africa?

Phosphate demand is entirely dependent on the need for food. Food demand is driven by population growth and urbanisation. South Africa currently imports approximately 60% of its fertilizer needs, making access to phosphate critically important to South Africa's future food security.

How did the minerals get there?

The Elandsfontein deposit is approximately 5 million years old. Initially the sea levels were much higher, and Elandsfontein was a protected coastal embayment.

The phosphate deposit is a result of the marine animal remains that inhabited the protected coastal waters. The phosphates at Elandsfontein occur in the form of apatite grains that are found between the sand (silica) particles.

Have we always known about the Elandsfontein deposit?

Samancor previously owned and operated the old Chemphos Mine, where the West Coast Fossil Park is currently situated. Samancor knew of the Elandsfontein deposit, and were planning to mine it once the resources at Langebaanweg were depleted in the mid 1980's. However, due to changes in the company's strategy, and depressed phosphate prices at the time, they chose not to develop the resource.

Why is roll over mining the preferred mining method?

Roll over mining, as it is planned at Elandsfontein, is an open cast mining method where the mining takes place in 50m wide strips. This method has been selected because it allows the early commencement of rehabilitation. The first rehabilitation will start during the third year of operation.

This also means that a large open pit will never be exposed, only small sections at a time, lessening dust creation and the mining footprint.

PERMITTING AND LEGISLATION

Was a proper environmental study done?

Approximately R25 million has been spent on various independent and third party specialist studies on Elandsfontein to address all concerns raised by interested and affected parties. The Elandsfontein project's major international lenders and important local investors have been satisfied in this regard. To this extent the Elandsfontein project complies with Equator Principles, which exceeds South African social and environmental legal standards. Due diligence processes were conducted by leading legal and consulting firms in South Africa, and have found that legislative requirements have been

complied with.

Are you compliant with all environmental legislation?

The Elandsfontein mine is compliant with legislation pertaining to mining and environmental matters. Please feel free to contact us for further information.

GEOGRAPHICAL LOCATION

Is the mine on West Coast National Park land?

The mine is on the Elandsfontein farm, which is privately owned. The total farm property covers almost 5,000ha, but the mining area will be just over 500ha in total and will be fenced off. The area of the West Coast National Park adjacent to the mine is a remote wilderness area, which is inaccessible to the public.

Is the project in a Critical Biodiversity Area?

There are no declared Critical Biodiversity Areas (CBAs) in the Western Cape. Kropz has however treated the Elandsfontein project as being an extremely sensitive area, with every environmental aspect being considered.

Will the mine impact the Elandsfontein fossil area?

Elandsfontein has been working closely with the University of Cape Town, the Council of Geoscience and Heritage Western Cape to proclaim the fossil area as a Provincial Heritage Site. This status will help to protect the area and allow further archaeological work to be completed on the dunes. The fossil area is approximately 5km from the mine area. Dr David Braun from the University of Cape Town and Dr Graham Avery, ex-curator from the Iziko Museum, have been part of the process and believe that the mine will have a positive impact on the area, since buried fossils are seldom found without some form of excavation.

Elandsfontein has planned for any stoppages that may occur in the event that mining uncovers any fossils of archaeological interest.

ENVIRONMENTAL IMPACT

Will any wildlife on the farm be negatively affected?

The mining area will be roughly 500ha on the total property size of almost 5,000ha, and will be fenced off.

The large mammals will be removed from the mining area before any activity starts, and a search and rescue will be conducted for the smaller mammals and reptiles.

The wildlife will then be free to roam on the remaining 4,500ha.

Will the project harm or negatively impact any plant life?

Some plant life within the mining footprint will be temporarily lost. The biggest portion of the mining area is in an area of medium botanical sensitivity. According to Nick Helme, the botanist consulted for the work on Elandsfontein, none of the plant species are classified as critically endangered.

During the preparation of the mine footprint, an extensive search and rescue operation for species of conservation concern is being done and species are being transplanted to a dedicated nursery for replanting during the rehabilitation process.

Will the mining create any harmful waste?

Mining of the Elandsfontein phosphate deposit will create no harmful waste. The Elandsfontein deposit contains extremely low levels of any harmful elements associated with sedimentary phosphates, such as uranium, cadmium, arsenic and mercury. It also contains no sulphur, which is the element normally associated with acid mine drainage.

The mine will not produce any radioactive waste.

The process at Elandsfontein is a physical separation of the phosphates from the silica. This means that the final mine waste from Elandsfontein will be clean silica sand.

The potential long-term degradation of waste material has been conclusively tested at world-class laboratories.

Will the project create any dust that will negatively affect public roads, public areas or residential areas?

Because of the selected strip mining method, only a small area of the footprint will be exposed at any one time, which will reduce the potential dust effects.

DDA Consultants, the air quality specialists, believe that the largest source of dust would be the vehicles on the gravel roads in the mining area. To lessen this, Elandsfontein has tarred the main access road between the mine and the R45.

Dust suppression in the form of water sprays will be used on all gravel roads, and on all transfer points within the plant to keep dust to a minimum.

How will you make sure that phosphate dust doesn't get blown around?

The concentrate will be stored in a closed storage shed, transported to an intermediate storage facility in covered trucks, stored again in a sealed warehouse and finally hauled into

port and loaded into the ship via a closed skip. The phosphate concentrate will not be exposed and therefore won't pose a dust threat.

Will the mine affect the famous West Coast flowers?

The impact of the mine on vegetation will be restricted to the actual area of mining and the areas affected by the processing plant and access roads. The rehabilitation plan will ensure that mined out areas will be systematically restored to what it was before mining. At the end of the mine lifespan, only a small portion of the mine will have to be restored. All valuable plants are continuously removed before any disturbance takes place and will be re-planted.

The colourful annual West Coast wild flowers are mostly associated with old agricultural areas and will not be affected by the mining.

WATER IMPACT

How will the mine use and affect our ground water?

The Elandsfontein phosphate deposit lies below the water table, and within the Elandsfontein aquifer. In order to mine the phosphate deposit, the mining area will be temporarily dewatered. To dewater the mine pit, Elandsfontein will install a set of borehole pumps to divert the water around the mining area, through a network of closed pipes, to be reintroduced to the aquifer downstream from the mining area.

Extensive ground water studies have been carried out by Geoss Ground Water Consultants and SRK Consulting. Geoss developed a regional ground water model, looking at the underground water from the Berg River to the Langebaan Lagoon. As part of a ground water impact assessment, they confirmed that the potential impact on the lagoon from the mining activities would be low. SRK created a groundwater model focussing on the mining area and the lagoon, to allow correct design of the borehole dewatering pumps and the aquifer recharge system. Their findings confirmed that the mine could have negligible impact on the lagoon.

The water studies have been reviewed by a number of specialists, who were in agreement with Geoss' and SRK's model inputs and subsequent findings.

Elandsfontein has also sought guidance from the Department of Water and Sanitation, to understand the nature of the aquifers, and any potential impact its operation could have on the ground water in the area.

Examples of similar case studies where the successful discharge of aquifers has been implemented for the dewatering of mining

operations include:

- Finsch Diamond Mine, South Africa;
- Kolwezi Copper Mines, DRC;
- Robinson Copper, Molybdenum, Gold Mine, USA;
- Mosaic Phosphate Mine, USA; and
- Premier Coal Mine, Australia.

A surface water study was completed by Blue Science water specialists. There is no surface water within the mining area, or on the Elandsfontein properties. The surface water study considered the impact on the Groen and Sout Rivers, and the Langebaan Lagoon. It was concluded that there will be negligible impact on any surface water by the mine, especially considering the distance of the mine from any surface water.

COMMUNITY IMPACT

What is Elandsfontein's empowerment status?

Kropz's South African subsidiary (which is the 100% owner of the Elandsfontein project) is a 30% black owned company.

Ubuntu-Botho, through its wholly owned subsidiary, African Rainbow Capital, is Elandsfontein's Black Economic Empowerment partner.

The shareholding of Ubuntu-Botho consists of Sizanani-Thusanang Helpmekaar (controlled by the Motsepe family trusts), the Sanlam Ubuntu-Botho Community Development Trust and a broad base of stakeholders that includes church groups, trade unions and women's groups, amongst others, representing approximately 500,000 previously disadvantaged people and making it one of South Africa's most broad based empowerment groupings. To date, over 400,000 previously disadvantaged people have directly benefitted from the annual disbursement of funds through the community development trust.

Dr Rejoice Simelane and Prof Thandabantu Nhlapo represent Ubuntu-Botho on the Kropz board.

How will the project impact the local economy?

The direct employment at the mine of roughly 300 people is only a small part of the total impact. According to Theta Research and Strategy Consultants' Socio Economic Impact Assessment, 300 additional breadwinners will support almost 1,500 individuals. The most significant economic benefit of the mine will be the creation and support of secondary services to the mine, like transport, engineering maintenance, office and catering supplies, general supplies etc.

Will the project negatively impact the availability of any public services to residents in the area, such as electricity and water?

No. Elandsfontein has secured water from the Saldanha Bay Municipality for the first three years of operation. The mine has been granted 2.4ML/day from the SBM but is expected to use less than this.

The Saldanha Bay Municipality has allocated all the treated effluent water from the Vredenburg waste water treatment plant to Elandsfontein. During the three year period, arrangements will be made to further treat this water for industrial use in Saldanha, to offset the water consumed by the operation. Eskom has ensured that there is available electricity on the grid and the mine has invested in building its own electrical sub-station on the mine site. The power demand for the project is approximately 8MVA. During load shedding, the power supply to the site will be reduced, as for most other industries. Elandsfontein has made provision for emergency back-up power supply should this happen.

Will the mining be visible from any road or residential area?

No part of the mine will be visible from any residential area. Only the crest of the softs stockpile may be seen from the R27 and the R45 during the mining operation. The nearest communities (Langebaan and Hopefield) are approximately 15km away, as the crow flies. Hopefield is 23km by road from the mine office.

What is the traffic impact on the area?

The R45 is a freight route linking the N7 with the Port of Saldanha. The main access road for the mine is planned from the R45. The R27, which is the main tourist route in the area, will not be impacted.

Based on current calculations, trucks will travel a maximum of 96 round trips per day to deliver concentrate to Saldanha. Over the life of the mine, the Elandsfontein project is expected to increase heavy traffic on the R45 by up to 23%.

This has been classified as a medium negative impact by Royal Haskoning DHV, who conducted the traffic impact assessment, completed in April 2015.

Working together with the local transport contractor, Elandsfontein is looking at using larger vehicles, which would reduce the number of concentrate trucks on the road by almost 30%.

Will the project create any noise that will be heard from public roads or any residential area?

A specialist study has shown that noise from the mine cannot be heard 1.7km from the

mining activity. The closest community to the mine is approximately 15km away.

Will the phosphate pose any danger to humans?

The phosphate concentrate produced will be a stable, odourless grain. At a localised level, repeated, direct inhalation of excessive dust may cause irritation to the respiratory system and this is fully mitigated for by strict health and safety practices for all mine workers.

AFTER MINING

How long will the mining last?

The mining operations are currently estimated to run for 15 years. Rehabilitation will take place for the full life of the mine and for a further three years once mining has ended.

What will happen with the rest of the farm?

Elandsfontein, as part of its offset commitments, has committed to creating a large protected area, which will be known as the Elandsfontein Nature Reserve. The reserve will be created from the remaining extent of the land together with certain neighbouring properties to contribute towards the sustainability and conservation of the West Coast area.

What will the mining area look like after it is closed?

According to the rehabilitation specialist (Deon van Eeden of Vula Environmental Services), the area will be self-sustainable two winter seasons after final rehabilitation. It is Elandsfontein's intention to leave behind a fully functional ecosystem that can be incorporated into the Elandsfontein Nature Reserve or potentially into the West Coast National Park.

Deon was involved in the rehabilitation of the Chemphos mine, which only commenced long after the mine was closed. From lessons learnt during this project, Elandsfontein has started rehabilitation processes and planning now to make sure that the land used for mining can be integrated into the larger conservation area.

How will rehabilitation be funded?

There are two parts of the rehabilitation process that need to be considered. Once steady state mining has been reached, ongoing rehabilitation will be covered in the daily operating cost of the mine. The closure rehabilitation costs are covered in the form of a bank guarantee, which is held by the Department of Mineral Resources. This quantum of the rehabilitation fund held by the Department of Mineral Resources is recalculated every year, based on the detailed mine plan for the following 12 months and the costs associated with the removal of

the permanent infrastructure that will be removed once the mine is closed, allowing the rehabilitation cost to be spread over the life of the mine.

Certain elements of the infrastructure, such as the mine access road, the overhead power lines and water pipeline and the mine offices, will remain following the closure of the mine. These items will facilitate tourism development in the area.



ANTWOORDE OP JOU VRAE OOR ELANDSFONTEIN-MYN

Ons het die vrae wat ons gedurende die afgelope drie jaar by verskeie openbare deelname-vergaderings gekry het saamgevat, en hier is die antwoorde.

OORSIG

Wie is Kropz?

Kropz in 'n eksploreerder, myn ontwikkelaar en myner van kunsmis verwante minerale. Kropz streef daarna om 'n vertikale geïntigreerde kunsmis vervaardigings kapasiteit te ontwikkel vir die vervaardiging van 'n progressiewe reeks plant voedingstowwe vir die sub Sahara landbouw industrie.

Wat beteken die hart dan?

Die gebruik van die groen hart in die Kropz- logo verteenwoordig Kropz se volgehoue toewyding aan sy sorgsame benadering teenoor sy mense en gemeenskappe, sowel as sy verantwoordelikheid teenoor die omgewing waarin dit werksaam is.

Wat is die verband tussen Kropz en Elandsfontein?

Kropz is die meerderheidsaandeelhouer in, die vernaamste befondser van, en die grootste kredietverskaffer vir die ontwikkeling van die Elandsfontein-fosfaatprojek. Kropz se verbondenheid tot die Elandsfontein-projek word gedryf deur sy doelwit om toegang te verkry tot kunsmisvoermateriaal van wêreldgehalte. Fosfaat is die mees gesogte van hierdie materiale.

Die Kropz-bestuurspan wat die Elandsfontein-projek ontwikkel, is verbind tot omgewingstandaarde van wêreldgehalte ten opsigte van elke aspek van die projek. Hiertoe het hulle die doel om van Elandsfontein die wêreld se eerste algehele groen ontginningsbedryf te maak.

Waarom ontginning op Elandsfontein?

Elandsfontein is Suid-Afrika se grootste bekende sedimentêre fosfaatneerslag en die tweede grootste na die vulkaniese Phalaborwa-neerslag. Laasgenoemde is nie ekonomies in staat om in Suid-Afrika en die Afrika subkontinent se fosfaatbehoeftes te voorsien nie. Dit stel op die lange duur voedselsekuriteit in gevaar.

Waarom is fosfaat so belangrik?

Fosfate is 'n vorm van sout wat natuurlik voorkom in fosfor. Plante het fosfor nodig om te groei. Fosfaatkunsmis dra daartoe by om oesopbrengste te vergroot sodat meer voedsel uit minder grond geproduseer kan word.

Hoeveel geld belê Kropz in Elandsfontein?

Kropz belê R1,35 miljard in die ontwikkeling van die Elandsfonteinprojek. Alle moontlike

stappe word geneem om voordele direk aan plaaslike sake-ondernemings in die Saldanhabaai-munisipaliteit te maksimaliseer.

Is dit nodig dat ons fosfaat in Suid-Afrika ontgin?

Die aanvraag na fosfaat is geheel en al afhanklik van die behoefte aan voedsel. Die vraag na voedsel word gedryf deur bevolkingsgroei en verstedeliking. Suid-Afrika voer tans sowat 60% van sy kunsmisbehoeftes in, wat toegang tot fosfaat krities belangrik maak vir Suid-Afrika se toekomstige voedselsekuriteit.

Hoe het die minerale daar gekom?

Die Elandsfontein-neerslag is nagenoeg vyf miljoen jaar oud. Aanvanklik was die seevlak baie hoër en Elandsfontein was 'n beskermd kusbaai. Die fosfaatneerslag is die produk van die seedier-reste wat in die beskermd kuswaters geleef het.

Die fosfate by Elandsfontein word gevind in die vorm van apatietkorrels tussen die sanddeeltjies (silika-deeltjies).

Het ons altyd geweet van die Elandsfontein-neerslag?

Samancor was die vorige eienaar van die ou Chemphos-myn wat die maatskappy bedryf en ontgin het waar die Weskus Fossieelpark tans geleë is. Samancor het geweet van die Elandsfontein-neerslag, en was van plan om dit teen die tyd wat die hulpbronne by Langebaanweg in die middel van die 1980s uitgeput was, met die ontginning van die myn te begin. As gevolg van veranderinge in die maatskappystrategie en die bedrukte fosfaatpryse op daardie tydstip, het hulle egter besluit om nie die hulpbron te ontwikkel nie.

Waarom is oor-rol myn metode die voorkeurmynbou-metode?

Oor-rol myn metode, soos in die vooruitsig gestel word op Elandsfontein, is 'n oopmynontginningsmetode waar die ontginning plaasvind in 50 meter wye stroke. Hierdie metode maak voorsiening vir die vroeë aanvang van rehabilitering. Die proses van rehabilitering sal 'n aanvang neem gedurende die derde jaar nadat daar met die ontginning begin is.

Dit beteken ook dat slegs klein ontginningsgedeeltes op 'n slag sigbaar sal wees en dat 'n groot oop put of gat nooit blootgelê sal word nie. Dit maak dat minder stof veroorsaak word en verklein die mynbouvoetspoor.

WETGEWING EN TOESTEMMINGS

Is 'n behoorlike omgewingstudie gedoen?

Sowat R25 miljoen is bestee aan verskeie onafhanklike en derdeparty-spesialisstudies

rakende Elandsfontein om alle besorgdhede en besware van belangstellende partye te hanteer. Ten opsigte van hierdie besware is die Elandsfonteinprojek se vernaamste internasionale kredietverskaffers en belangrike plaaslike beleggers tevrede. Dermate voldoen die Elandsfonteinprojek aan die Equator-beginsels en oortref wettige Suid-Afrikaanse maatskaplike en omgewingstandaarde. Kontroleringsprosesse is uitgevoer deur vooraanstaande prokureurs- en konsultasiefirmas in Suid-Afrika, en die bevinding is dat daar voldoen is aan wetgewende vereistes.

Voldoen julle aan alle omgewingswetgewing? Die Elandsfontein myn voldoen aan al die mynbou en omgewingswetgewing. Kontak ons indien u enige verdere informasie verlang.

GEOGRAFIESE LIGGING

Is die myn op die Weskus Nasionale Park gebied?

Die myn is op die Elandsfontein-plaas wat 'n private eiendom is. Die hele plaaseiendom dek nagenoeg 5 000 hektaar, maar die mynbougebied sal net meer as 500 hektaar beslaan, en sal as geheel afgekamp word. Die Weskus Nasionale Park gebied langs die myn is 'n afgeleë wildernisgebied waartoe die publiek nie toegang het nie.

Val die projek in 'n kritieke biodiversiteitsgebied?

Daar is geen verklaarde kritieke biodiversiteitsgebiede in die Wes-Kaap nie. Kropz benader egter die Elandsfontein-projek as 'n uiters sensitiewe gebied en alle omgewingaspekte word in ag geneem.

Sal die myn 'n invloed hê op die Elandsfontein-fossielgebied?

Elandsfontein het saamgewerk met die Universiteit van Kaapstad, die Raad vir Geowetenskappe en die Wes-Kaapse Erfenisraad om die fossielgebied as 'n provinsiale erfenisgebied verklaar tekry het. Hierdie status sal daartoe bydra dat die gebied beskerm is en om die nodige argeologiese werk op die duine te voltooi. Die fossielgebied is sowat vyf kilometer van die myngebied geleë. Dr. David Braun van die Universiteit van Kaapstad en Dr. Graham Avery, gewese kurator van die Iziko-museum is deel van die proses. Hulle is oortuig daarvan dat die myn 'n positiewe uitwerking op die gebied sal hê aangesien ondergrondse fossiele selde gevind word tensy die een of ander tipe spesifieke uitgrawing gedoen word.

Elandsfontein het beplan vir enige oponthoude wat kan voorkom ingeval fossiele van argeologiese belang tydens ontginning opgegrawe word.

OMGEWINGSIMPAK

Sal enige wild op die plaas nadelig beïnvloed word?

Die mynbougebied sal nagenoeg 500 hektaar van die volle grootte van die eiendom van ongeveer 5,000 hektaar beslaan en sal in die geheel afgekamp word.

Die groot soogdiere sal uit die mynbougebied verwyder word voordat enige werksaamhede 'n aanvang neem. 'n Soek-en-redding sal onderneem word vir die verwydering van kleiner soogdiere en reptiele.

Die wild sal dan vryelik op die oorblywende 4,500 hektaar kan wei.

Sal die projek enige plantelewe beskadig of 'n negatiewe uitwerking daarop hê?

Daar sal wel sommige plantlewe binne die mynvoetspoor tydelik verlore gaan. Die grootste gedeelte van die mynbougebied val in 'n gebied van gemiddelde botaniese sensitiwiteit. Volgens die botanis Nick Helm, die konsultant vir die werk op Elandsfontein, is geen een van die plantspesies geklassifiseer as kritiek bedreig nie. Gedurende die voorbereiding van die mynvoetspoor sal 'n soek- en reddingsproses vir Spesies van Bewaringskommer (SBK) gedoen word en die betrokke spesies sal verplant word na 'n toegewese kwekery vir herbeplanting tydens die rehabiliteringsproses.

Sal die ontginning enige skadelike afval tot gevolg hê?

Ontginning van die Elandsfontein-fosfaatdeposito sal geen skadelike afval tot gevolg hê nie. Die Elandsfontein-neerslag bevat uiters lae vlakke van enige skadelike elemente wat verbind word met sedimentêre fosfate, soos uranium, kadmium, arseen en kwik. Dit bevat geen swael wat die element is wat geassosieer word met suur mynwaterdreinering.

Die ontginning van die myn sal nie enige radioaktiewe afvalstowwe tot gevolg hê nie.

Die proses by Elandsfontein is 'n fisiese skeiding van fosfate uit die silika. Dit beteken dat die uiteindelige mynvermorsing uit Elandsfontein skoon silikasand sal wees.

Die potensiële langtermyndeградering van afvalstowwe is voldoende getoets by laboratoriums van wêreldgehalte.

Sal die projek enige stof tot gevolg hê wat 'n negatiewe uitwerking het op openbare paaie, gebiede en woongebiede?

As gevolg van die stroopmynboumetode word slegs 'n klein gebied van die mynvoetspoor te enige tyd blootgelê. Dié prosedure verminder die potensiële stofuitwerking in die gebied. Die DDA-lugehalte spesialiste is van mening dat die grootste bron van stof

moontlik die voertuie op die gruispaaie in the mynbougebied kan wees. Om stof te beperk, het Elandsfontein die hooftoegangspad tussen die myn en die R45 geteer.

Stofonderdrukking in die vorm van waterbesprinkeling sal op al die gruispaaie en op alle verskuiwingspunte in die aanleg gebruik word om stof tot die minimum te beperk.

Hoe maak julle seker dat fosfaatstof nie rondwaai nie?

Die konsentraat word in 'n geslote pakhuis gestoor; in bedekte vragmotors vervoer na 'n tussentydse bergingsplek; weer in 'n verseëld pakhuis gestoor, en ten laaste in die hawe in 'n bedekte verskepingshouer op die skip gelaai. Die fosfaatkonsentraat sal bedek wees en sal gevolglik nie 'n stofbedreiging inhou nie.

Sal die myn 'n impak hê op die bekende Weskus blomme?

Die impak van die myn op gewasse sal beperk wees tot die werklikke myn gebied en die areas wat geaffekteer sal word deur die prosesserings aanleg en toegangs pad. Die rehabilitasie plan sal verseker dat areas wat uitgemyn is sistematies herstel sal word soos wat dit was voor myn aktiwitewite 'n aanvang geneem het. Aan die einde van die myn se leeftyd sal slegs 'n klein area oor bly wat gerehabiliteer moet word. Alle skaars en waardevole plante word verwyder alvorens grond versteur word en weer herplant.

Die kleurvolle jaarlikse Weskus blomme word meestal geassosieer met ou landbou areas wat nie geaffelteer sal word deur mynbou aktiwiteite nie.

WATERIMPAK

Hoe sal die myn ons water gebruik en water uitwerking sal dit op ons grondwater hê?

Die Elandsfontein-fosfaatdeposito lê onder die watertafel en binne die Elandsfontein-akwifer. Ten einde die fosfaatneerslag te ontgin, sal die mynbougebied tydelik onttwater word. Om die mynput te onttwater, sal Elandsfontein 'n stel boorgatpompe installeer om die water rondom die mynbougebied te herlei deur middel van 'n geslote pypleidingsnetwerk wat by die akwifer afstrom van die mynbougebied heringevoer sal word.

Geoss Ground Water Consultants en SRK Consulting het uitgebreide grondwaterstudies uitgevoer. Geoss het 'n streekgrondwatermodel ontwikkel deur al die ondergrondse water van die Bergrivier tot by die Langebaan-strandmeer in oënskou te neem. As deel van 'n grondwaterimpakassessering het hulle bevestig dat die mynbou-aktiwiteite 'n geringe potensiële uitwerking op die strandmeer sal

hê. SRK het 'n grondwatermodel ontwikkel met fokus op die mynbougebied en strandmeer om voorsiening te maak vir die akkurate ontwerp van die boorgat-ontwateringspompe en die akwiferhervullingstelsel. Hulle bevindinge het bevestig dat die uitwerking van die myn 'n geringe invloed op die strandmeer mag hê.

Die waterstudies is deur verskeie spesialiste ontleed en alle betrokkenes was in ooreenstemming met Geoss en SRK se insette en gevolglike bevindinge.

Elandsfontein het ook raad ingewin van die Departement van Water en Sanitasie om die aard van die akwifere te verstaan sowel as om enige potensiële uitwerking te bepaal wat die werksaamhede daarvan op die grondwater in die gebied kan hê.

Vorige navorsing waar die suksesvolle afvoering en stroomafhervulling van akwifere toegepas is vir die ontwatering van mynboubedryf sluit in:

- die Finsch Diamond-myn, Suid-Afrika;
- die Kolwezi- en Kamoto-kopermyn, Demokratiese Republiek van die Kongo;
- die Robinson Copper, Molybdenum, Gold Mine, VSA; en
- die Premier Coal Mine, Australië.

Die waterspesialiste van Blue Science het met 'n oppervlakwaterstudie aangetoon dat daar geen oppervlakwater in die mynbougebied of op die Elandsfontein-eiendom is nie. In die oppervlakwaterstudie is die uitwerking op die Groen- en Soutrivier, sowel as die Langebaan-strandmeer in ag geneem. Die gevolgtrekking is dat daar 'n weglaatbare uitwerking sal wees op enige oppervlakwater as gevolg van die myn, veral indien die afstand tussen die myn en enige oppervlakwater in ag geneem word.

GEMEENSKAPIMPAK

Wat is Elandsfontein se bemagtigingstatus?

Kropz se Suid-Afrikaanse filiaal (wat die 100% eienaar van die Elandsfontein-projek is) is 'n maatskappy met 30% swarteienaarskap.

Ubuntu-Botho (UB), deur middel van sy volfiliaal, African Rainbow Capital, is Elandsfontein se breedgebaseerde swart ekonomiese bemagtigingsvennoot.

Die aandeelhouding van UB bestaan uit Sizanani-Thusanang Helpmekaar (beheer deur die Motsepe-familiestrusts), die Sanlam Ubuntu-Botho Gemeenskapontwikkelingstrust (gemeenskapsontwikkelingsfonds) en 'n groter groep aandeelhouers wat onder andere kerkgroeperings, vakunies en vrouegroepe insluit. Dit verteenwoordig meer as 500,000 voorheen agtergeblewe mense en maak dit een van Suid-Afrika se mees breedgebaseerde

swart ekonomiese bemagtigings groepe.

Tot op hede het meer as 400,000 voorheen agtergeblewe mense regstreeks baat gevind by die jaarlikse uitbetaling van gelde deur die gemeenskapsontwikkelingsfonds.

Dr. Rejoice Simelane en Prof. Thandabantu Nhlapo verteenwoordig Ubuntu-Botho op die Kropz-raad.

Hoe sal die projek 'n invloed hê op die plaaslike ekonomie?

Die regstreekse werkverskaffing by die myn van sowat 300 mense vorm slegs 'n klein gedeelte van die algehele resultaat. Volgens 'n sosio-ekonomiese impakassessering gedoen deur Theta Research and Strategy Consultants, sal 300 bykomende broodwinners bykans 1,500 individue ondersteun. Die belangrikste ekonomiese voordeel van die myn is die verskaffing en ondersteuning van sekondêre dienste aan die myn, soos vervoer, werktuigkundige instandhouding, kantoor- en spysenieringsverskaffing, verskaffing van algemene gebruiksvorraad, en so meer.

Sal die projek 'n negatiewe impak hê op die beskikbaarheid van enige openbare dienste soos elektrisiteit en water aan inwoners van die gebied?

Nee. Elandsfontein het vir die eerste drie jaar van die bedryf water verseker van die Saldanhabaai-munisipaliteit (SBM). Die myn het by die SBM aansoek gedoen vir 2,4 ML per dag, maar daar word verwag dat minder gebruik sal word.

Die SBM het al die behandelde rioolwater van die Vredenburg-afvalwater-behandelingsaanleg aan Elandsfontein toegeken. Gedurende die driejaartydperk sal reëlings getref word om hierdie water steeds vir industriële gebruik in Saldanha te behandel om te kompenseer vir die water wat in die bedryf van die myn gebruik is.

Eskom het verseker dat daar beskikbare elektrisiteit op die kragnetwerk is en die myn het daarin belê om sy eie elektrisiteitsubstasie op die ontginningsaanleg te bou. Die elektrisiteitsaanvraag vir die projek is sowat 8 MVA. Gedurende beurtkrag word die elektrisiteitstoevoer na die aanleg verminder, soos vir die meeste ander klein industrieë. Elandsfontein het voorsiening gemaak vir noodbystand-elektisiteitsvoorsiening in die geval van beurtkrag.

Sal die myn sigbaar wees van enige pad of woongebied?

Geen gedeelte van die myn sal sigbaar wees van enige woongebied af nie. Slegs die kruin van die voorraadstapel is gedurende die ontginningsproses van die R27 en die R45 af sigbaar. Die naaste gemeenskappe (Langebaan en Hopefield) is soos die kraai vlieg ongeveer 15 kilometer verder. Hopefield is per pad 23 kilometer van die mynkantoor af.

Watter uitwerking sal verkeer op die gebied hê?

Die R45 is 'n vragvervoerroeite wat die N7 met die hawe van Saldanha verbind. Die hooftoegangspad tot die myn word van die R45 af beplan. Dit sal geen uitwerking hê op die R27 wat die vernaamste toerismoeroete is nie.

Gegronde op huidige berekeninge, behoort vragmotors 'n maksimum van 96 heen-en-terug-ritte per dag te maak om konsentraat na Saldanha-hawe te vervoer. Die veronderstelling is dat die Elandsfontein-werksaamhede vir die lewensduur van die myn die verkeer op die R45 tot 23% sal verhoog.

Volgens Royal Haskoning DHV wat die verkeersimpakassessering uitgevoer en in April 2015 voltooi het, word die uitwerking van die verkeer op die omgewing as gemiddeld geklassifiseer.

In samewerking met die plaaslike vervoerkontraakteur beplan Elandsfontein om groter voertuie te gebruik om die aantal konsentraat-vragmotors op die pad met sowat 30% te verminder.

Sal die projek enige geraas veroorsaak wat van die openbare paaie of woongebied hoorbaar sal wees?

Deur middel van 'n spesialisstudie het navorsers tot die gevolgtrekking gekom dat die geraas nie vir 1,7 kilometer van die mynbedrywighede hoorbaar is nie. Die naaste gemeenskap aan die myn is sowat 15 kilometer verder weg.

Hou die fosfaat enige gevaar vir mense in? Die fosfaatkonsentraat wat geproduseer word, is 'n stabiele, reuklose korrel. Herhaaldelike gelokaliseerde en direkte inaseming van oormatige stof kan irritasie in die asemhalingsstelsel veroorsaak, maar streng gesondheids- en veiligheidspraktyke vir alle mynwerkers sal die gevaar hiervan verminder.

MYN NALATENSKAP

Hoe lank sal die ontginning duur?

Tans word in die vooruitsig gestel dat die mynbedrywighede 15 jaar in werking sal bly. Rehabileringsal vir die volle bedryfslewe van die myn in stand gehou word, en daarna vir nog drie jaar nadat die ontginning van die myn tot 'n einde gekom het.

Wat gaan met die res van die plaas gebeur?

Elandsfontein het as deel van sy kompenseringsverbintenis hom verbind tot die daarstelling van 'n groot beskermde gebied wat bekend sal staan as die Elandsfontein Natuurreserveaat. Die reserveaat word ontwikkel uit die oorblywende omvang van die grond en sekere naburige eiendomme om by te dra tot

die onderhoubaarheid en bewaring van die Weskus-gebied.

Hoe sal die mynbougebied daar uitsien nadat dit toegemaak is?

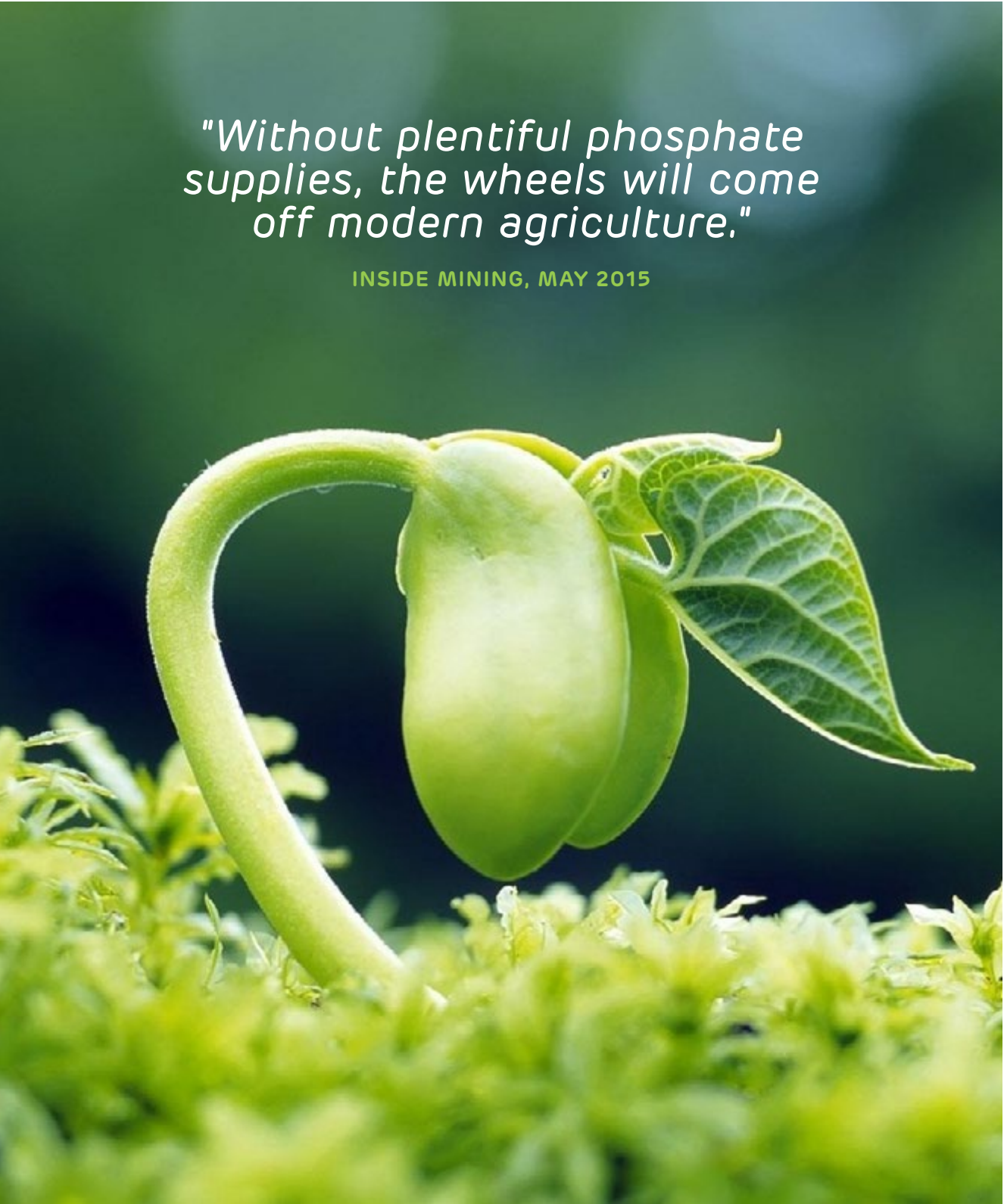
Volgens die rehabilitasiespesialis, Deon van Eeden van Vula-omgewingsdienste, sal die gebied twee winterseisoene na die uiteindelik rehabilitasie selfonderhoudend wees. Dit is Elandsfontein se bedoeling om 'n volkome funksionele ekostelsel in plek te laat wat by die Elandsfontein Natuurreserveaat of potensieel by die Weskus Nasionale Park ingelyf kan word.

Deon was betrokke by die rehabilitasie van die Chemphos-myn, 'n proses wat eers lank nadat dié myn gesluit is, 'n aanvang geneem het. Die insigte uit hierdie projek het tot gevolg dat Elandsfontein tans reeds 'n aanvang geneem met die rehabilitasieprosesse en rehabilitasiebeplanning om te verseker dat die grond wat vir ontginning gebruik gaan word in die groter bewaringsgebied geïntegreer kan word.

Hoe sal rehabilitasie befonds word?

Daar is twee dele van die rehabilitasieproses wat in ag geneem moet word. Wanneer bestendige ontginning teweeggebring is, sal volhoudende rehabilitasie gedek word deur middel van die daaglikse bedryfskoste van die myn. Die sluitings-rehabilitasiekoste word gedek deur middel van 'n bankwaarborg wat ingedien is by die Departement van Minerale Hulpbronne. Hierdie kwantum van die rehabilitasiebefondsing word elke jaar herbereken, gegrond op die gedetailleerde ontginningsplan vir die daaropvolgende 12 maande sowel as die koste van die verwydering van die permanente infrastruktuur wanneer die myn gesluit word. Sodoende word voorsiening gemaak vir die verspreiding van die rehabilitasiekoste oor die leeftyd van die myn.

Sekere elemente van die infrastruktuur, soos die toegangspad na die myn, die oorhoofse kragdrade, die waterpyplyne en die mynkantore sal behou word nadat die myn gesluit is. Hierdie strukture sal bevorderlik wees vir toeristeontwikkeling in die gebied.



"Without plentiful phosphate supplies, the wheels will come off modern agriculture."

INSIDE MINING, MAY 2015

