SOUTH AFRICAN DIAMOND HANDBOOK AND OPERATING DIAMOND MINES DIRECTORY, 2016

DIRECTORATE: MINERAL ECONOMICS





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AND OPERATING DIAMOND MINES

DIRECTORY, 2016

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Cover Picture: One of the World's Major Diamond Mines, Petra's Finsch Mine. Source: www.petradiamonds.com/media/image-library/mines/finsch/

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1. INTRODUCTION

Diamonds have long been greatly valued as gems due to their superiority to other minerals in terms of hardness and the perfection of their clearness, transparency and lustre. Such characteristics arouse interest regarding the origin and natural occurrence of diamonds, as well as exploration, mining and trading of these precious stones.

In South Africa, it has been more than 140 years since the discovery of the Eureka diamond in 1867, which led to the birth of the modern diamond industry. The country's diamond industry has transformed over the years, accompanied by changes in legislation, specifically amendments to the Diamonds Act 56 of 1986, and the Diamonds Export Levy Act 15 of 2007.

The first diamonds found in South Africa were alluvial and by 1870, a blue, hard, igneous rock, later named kimberlite, was discovered as the primary source of diamonds. Diamonds could also be found on the seabed along the west coast of South Africa in the early 20th century. Today the country remains one of the top ten diamond producers globally and diamonds are still mined from all three sources.

As the diamond industry grew world-wide, so did the flow of conflict diamonds – rough diamonds used by rebel movements to finance wars against legitimate governments. South Africa played a leading role in the creation of the Kimberley Process (KP), a joint governments, industry, and civil society initiative to stem the flow of conflict diamonds.

This handbook attempts to shed some light on the above-mentioned issues, from diamond origin and occurrence to exploration, mining and trading, as well as legislation governing South Africa's diamond industry and the role of the KP Certification Scheme. Finally, a detailed list of some major diamond operations is provided in the last chapter of the handbook.

2. ABOUT DIAMONDS

2.1 THE ORIGIN AND OCCURRENCE OF DIAMONDS

A diamond is a mineral consisting of pure crystallized carbon. It is therefore chemically identical to both graphite and charcoal. The extraordinary difference in the appearance of diamond and that of other forms of carbon minerals depends solely on the crystallization of the material and subsequent physical characteristics. During crystallization of diamond, for example, various elements other than carbon may be incorporated into the diamond matrix as impurities or discrete mineral inclusions. As a result, a diamond can appear colourless, yellow, blue, pink or red, depending on the presence, type and quantity of impurity elements.

Natural diamonds form at very high temperatures (900 – 1300°C) and pressures (45 – 60 kilobars), at depths greater than 150 km below the surface of the earth. It is widely believed that reduction or oxidation reactions involving carbon-bearing compounds such as carbon dioxide and methane contribute to the formation of diamonds. Most natural diamonds crystallized between 900 million and 3.3 billion years ago within the earth's mantle from either of two rock types; peridotites and eclogites.

After their formation, diamonds were transported to the earth's crust by volcanic activity. Magma (molten rock) carried rock fragments and mineral components of peridotites and eclogites (including, on occasions, diamonds) from the mantle to the crust, forming kimberlite dykes or carrot-shaped kimberlite pipes, named after the South African town of Kimberley, where the first diamonds were found in this type of rock conglomeration. During transportation, disaggregation of diamond-bearing peridotites yields several other minerals such as pyrope garnets, olivine, spinel, ilmenite, chromediopside and chromite. This group of minerals is referred to as kimberlite indicator minerals.

Diamonds were stored in the mantle for varying periods of time and are thus much older than the kimberlite that brought them to the earth's surface. Not all kimberlites contain diamonds, though, as some either failed to sample diamond-bearing periodites and eclogites or lost a part of or their entire diamonds load during their ascent to the earth's crust. In fact, only 1 in 200 kimberlites will contain diamonds in economically viable quantities. Diamondiferous kimberlites are known to be those confined to regions of continental crust that are ancient cratons.

Another primary diamond source rock-type, similar in composition to kimberlite, is the lamproite. Lamproite pipes are created in a similar manner to kimberlite pipes, except that boiling water and volatile compounds contained in the magma act corrosively on the overlying rock, resulting in a broader cone of eviscerated rock at the surface. This results in a martini-glass shaped diamondiferous deposit as opposed to kimberlite's carrot shape. In South Africa, kimberlite is the dominant primary host rock for diamond occurrences, as opposed to lamproite in Australia.

Alluvial diamond deposits are usually located within river terrace gravels that have been transported from their location of origin, usually from kimberlite deposits. Alluvial diamond-bearing gravels commonly yield diamonds that are predominantly of gem quality. This is attributed to the fact that during transportation, only diamonds which are able to withstand attrition and continuous sorting are left, while poorly formed stones and those with inclusions are either lost or destroyed. Diamonds that were transported downstream, but were not deposited on land, made their way to the sea bed just offshore. In South Africa, alluvial diamond-bearing gravels occur at Lichtenburg, Ventersdorp, Wolmaransstad, Barkley West, along the Orange and Vaal River systems, on the coast of the Northern Cape and Western Cape provinces as well as offshore on the west coast.

2.2 DIAMOND EXPLORATION

Modern diamond exploration uses both traditional and sophisticated technologies to identify and assess new diamond deposits. The first step is to decide where to explore and, through a combination of techniques, identify targets for subsequent phases. Three main techniques used in early diamond exploration are sampling, geophysics and drilling.

Sampling of soil and stream sediments for minerals that indicate kimberlite is used in the discovery and initial assessment of new kimberlites. Indicator minerals include spinel, olivine, garnet, chrome diopside and ilmenite. Samples are processed and indicator minerals extracted, counted and analysed. Highly effective geophysics techniques such as gravity and seismics are used from surface to detect differences in the geology in order to make new discoveries and to assess the shape and form of the kimberlite. Upon the discovery of a kimberlite, a variety of drilling techniques are used to extract the material for further analysis.

Once a promising diamond deposit has been identified, advanced specific methods such as micro- and macro-diamond analyses are used to further assess and develop it. The former uses the size, frequency and distribution of tiny diamonds to assess the potential of the deposit, while the latter is concerned with bulk-sampling of high-interest kimberlites to extract diamonds for grade and revenue estimates. Macro-diamond analysis is also used to draw up geological models of the area in question.

2.3 DIAMOND MINING

The discovery of diamonds in significantly economic quantities is followed by different types of mining, depending on the type of deposit. Kimberlite mines can be either open-cast, where diamond deposits are mined on the uppermost part of the kimberlite, or underground, where diamond deposits are mined at greater depths. Underground mining is usually undertaken by the "block caving technique", which involves the construction of a series of

concrete-lined tunnels through the pipe. The kimberlite is then under-mined so that it breaks up to fall through draw-points in the concrete-lined tunnels onto levels from where it is transported for processing. In the processing plant, the diamond-bearing ore is crushed and passed as slurry through various stages of separation and screening to form a concentrate. Diamonds are then recovered, usually by using grease tables or X-ray technology. The mining of dykes or fissures is carried out by driving tunnels into the host rock, parallel to the strike of the dyke. This is followed by running crosscuts from these tunnels to gain access to the dykes.

Alluvial mining is undertaken both at the coast and inland, and involves the mechanized removal of overburden (usually sand and boulders) to expose the layer of diamond-bearing gravel. Marine mining involves specialized ships equipped with prospecting tools, mining heads, screening equipment and recovery plants, to recover diamonds from the seabed.

2.4 DIAMOND TRADE

Clarity, colour, carats and cuttability (4Cs) of the diamond determine the quality and hence the price of the stone. The fifth C, confidence in terms of the source as per Kimberley Process Certification Scheme (KPCS) specifications, is being considered. Both clarity and colour are related to the presence or size of the inclusions, while a carat is a mass measurement (1 carat = 0,2g). Generally, less than 50 percent of kimberlite production is of gem quality. By contrast, more than 70 percent of alluvial and more than 80 percent of marine production are of gem quality. As a result, diamond production is marketed in four broad categories; gem diamonds, near-gem diamonds, industrial diamonds and synthetic gem diamonds.

2.4.1 Gem Diamonds Market

The gem-diamond industry is subdivided into two markets: a rough gemdiamond market and a polished diamond market. The former is dominated by the De Beers group of companies, particularly by its marketing arm, the Diamond Trading Company (DTC). One of the key activities of the DTC is the sorting and valuation of rough diamonds. As diamonds arrive from the mines, they are sorted into different categories depending on the shape, size, quality and colour. The four sorting offices are DTC SA in Kimberley, DTC Botswana in Gaborone, DTC Namibia in Windhoek and DTC UK in London. The sorting process ensures the correct valuation of all production. It also ensures that a consistent supply of rough diamonds can be delivered to DTC's clients, who are known as sightholders. The DTC markets its diamonds every 5th week of the year to established sightholders. Such sales are known as sights.

The polished diamond market is a free, competitive market with multiple sellers and buyers. Economic factors such as economic growth rate of consuming nations, employment, disposable income and foreign currency rates have a much greater influence on polished diamond prices than does the DTC. The major difference between rough and polished diamond prices is that the latter are more dependent on supply and demand. If the demand is high and supply is limited, buyers will be forced to purchase rough diamonds to generate new supplies of polished stones.

2.4.2 Near-gem and Industrial Diamond Markets

Near-gem diamonds are essentially industrial diamonds that have a small gem-quality portion (less than 25 percent) that can only be cut economically in centres where labour costs are very low, such as in India. Approximately 80 percent of the world's production of diamonds is cut in India and provides employment for more than 750 000 people.

Industrial diamonds are those diamonds which, because of their inferior quality and/or undesirable colour, cannot be sold as gems. Instead, they have three main uses in the industry, which are:

- As a cutting tool
- > As an abrasive
- As a grinding or polishing powder or paste

Diamond's resistance to wear allows it to cut reproducibly time after time, an essential requirement of automated production.

2.4.3 Synthetic Gem Diamonds

Synthetic diamonds are man-made diamonds crystallized by any artificial process, which may include a chemical or physical process. Although synthetic diamonds have been synthesized for industrial applications for decades, it is only recently that gem-quality synthetic diamonds have become available commercially for jewellery applications.

Simple identification of synthetic gem diamonds cannot be easily applied as they are identical to natural diamonds in terms of all their physical, optical and chemical properties. Furthermore, with more technological development, it is becoming more and more difficult to distinguish between synthetic and natural diamonds. However, they can be distinguished with the right equipment such as DiamondSure or DiamondView technologies, both of which originate in Russia.

3. SOUTH AFRICA'S DIAMOND LEGISLATION

3.1 AMENDMENTS TO THE DIAMONDS ACT no. 56 of 1986

South Africa's Diamonds Act no. 56 of 1986 led to the establishment of the South African Diamond Board (SADB) in 1987 to regulate control over the possession, sale, purchase, processing and export of diamonds. However, this piece of legislation did not benefit cutters and polishers who make up the first stage of value addition in South Africa's diamond value chain. As a result, three pieces of legislation, namely the Diamonds Amendment Act, Act 29 of 2005, the Diamonds Second Amendment Act, Act 30 of 2005 and the Precious Metals Act, Act 37 of 2005 were promulgated in 2007, thereby broadening the legal mandate of the Board to also regulate precious metals. Subsequently the South African Diamond Board was de-listed as a Schedule 3A public entity in March 2007 and replaced by the South African Diamond & Precious Metals Regulator (SADPMR), which was established by Section 3 of the Diamonds Act, 1986 (as amended in 2005).

The objectives of the Regulator in terms of the Diamonds Act, 1986 (as amended) are to:

- ensure that the diamond resources of the Republic are exploited and developed in the best interests of the people of South Africa;
- promote equitable access to, and local beneficiation of, the Republic's diamonds; and
- > ensure compliance with the Kimberley Process Certification Scheme.

The Regulator's functions with regard to diamonds include:

implementing, administering and controlling all matters relating to the purchase, sale, beneficiation, import and export of diamonds; and ➤ establishing diamond exchange and export centres, which shall facilitate the buying, selling, export and import of diamonds and matters connected therewith.

Whilst the former SA Diamond Board had an essentially regulatory role, the SADPMR has a promotional role as well. Through administering licences and export approvals, the SADPMR will strive to ensure that local demand for diamonds and precious metals is catered for, and that there is growth in local beneficiation of diamonds and precious metals.

Amendments to the Diamonds Act are aimed at creating a framework for further downstream value addition and investment in the diamond manufacturing sector. The Diamonds Second Amendment Act, 2005, is aimed at ensuring equitable and regular supply of rough diamonds to local beneficiators by making provision for the establishment of the State Diamond Trader (SDT), which facilitates the equitable supply of rough diamonds. All diamond producers have to supply the SDT with 10 percent of their run-off mine production.

The Diamonds Second Amendment Act, 2005, also prohibits:

- > Sale and purchase of unpolished diamonds
- Assistance by non-licensed persons
- Processing of diamonds
- Erection and operation of machinery and
- Export of unpolished diamonds.

Exceptions are licensed producers, manufacturers, dealers, beneficiators, researchers and holders of permits.

The Minister of Mineral Resources has the power to exempt a producer from the requirement to offer rough diamonds intended for export for sale at the Diamond Exchange and Export Centre (as per section 48A of the Diamonds Act). This exemption also ensures that the Diamond Exchange and Export Centre (DEEC) is not overwhelmed with a high volume of low valued diamonds.

3.2 THE DIAMONDS EXPORT LEVY ACT 15 OF 2007

The main objective of the Act is to provide for the imposition of a 5 percent export levy on unpolished diamonds (but not including synthetic diamonds) and allows for offsets with respect to that levy. The 5 per cent rate, which has been determined in consultation with the Department of Mineral Resources and the South African Police Service, is viewed as sufficiently high to ensure, in addition to the efforts of the State Diamond Trader, a reasonable supply of rough diamonds to the local market and low enough not to unduly encourage smuggling.

Should the Minister of Mineral Resources decides that a producer need not offer his or her rough diamonds for sale at the DEEC before export, such diamonds will be exempted from the 5 per cent export levy. The Minister may also exempt a registered producer exporting rough diamonds from the levy if the diamonds are properly offered at the Diamond Exchange and Export Centre. This offer essentially gives local polishers a "right of first refusal". The Minister may provide this exemption to a producer under the following conditions:

Exemption for large producers

If during any assessment period:

- (a) the sum of a producer's gross sales to diamond beneficiators for that assessment period and the immediately preceding assessment period equal at least 40 per cent of the sum of that producer's total gross sales during the aggregate of those assessment periods;
- (b) the sum of the producer's total gross sales during those assessment periods exceeds R 3 billion.

Exemption for medium producers

If during any assessment period:

- (a) the sum of the producer's gross sales to diamond beneficiators for the assessment period and the immediately preceding assessment period equals at least 15 per cent of the sum of that producer's total gross sales during the aggregate of those assessment periods; and
- (b) the sum of the producer's total gross sales during those assessment periods do not exceed R3 billion.

Exemption for small producers

If during any assessment period:

- (a) the sum of a producer's total gross sales during the assessment period and the immediately preceding assessment period do not exceed R20 million;
- (b) the producer does not at any time during that period hold more than a 50 per cent ownership interest (directly or indirectly) in another producer;
- (c) the ownership interest in a producer is not at any time during that period, more than 50 per cent held (directly or indirectly) by another producer; and
- (d) the ownership interest in a producer is not at any time during that period held more than 50 per cent (directly or indirectly) by any person that during that period holds more than a 50 ownership interest (directly or indirectly) in any other producer.

Exemption for diamond beneficiators

If during any assessment period a diamond beneficiator holds a permit to export pursuant to section 26(h) of the Diamonds Act covering that entire assessment period, that diamond beneficiator is exempt in respect of its unpolished diamonds under the cover of a bill of entry for export delivered during that assessment period to the extent those unpolished diamonds were previously offered but not sold at a diamond exchange and export centre.

In addition to the requirements above, each diamond offered at the DEEC must satisfy the following four requirements to qualify for an exemption:

- (i) The rough diamond must be offered for sale at the Centre for a minimum of four days.
- (ii) The offer at the Centre must not have resulted in a local sale.
- (iii) The diamond sold for export must yield a price that is at least equal to the price at which that diamond was offered for sale at the Centre.
- (iv) Proof of the reserve price must be submitted to Customs.

These provisions preserve South Africa's "right of first refusal" by ensuring that local cutters and polishers have a fair opportunity to bid on rough diamonds prior to their export.

3.3 APPLICATIONS FOR LICENCES AND PERMITS

Any natural or juristic person may apply to the Regulator on the prescribed form for a license or permit. All prescribed forms can be found on the Regulator's website (www.sadpmr.co.za). The differences between licenses and permits are listed in Table 1.

TABLE 1: DIFFERENCES BETWEEN LICENSES AND PERMITS

LICEN	CE	PERM	IT
1.	An authorization granted to an applicant,	1.	Permission granted to an applicant to
	giving allowance to carry on a business		conduct an occasional specific activity for
	on a continuous or permanent basis. It		a fixed period of time, or in some cases to
	usually, but not necessarily, provides for		conduct a once-off or non-recurring
	the performance of more than one		activity.
	activity.		
2.	Licenses are valid until they lapse or are	2.	Permits expire, whereupon a new permit
	suspended or cancelled.		would have to be applied for.
3.	Licenses are only transferable by prior	3.	Permits are not transferable.
	approval.		

Currently, the Regulator may issue the following licenses, depending on whether or not the applicants meet the necessary requirements:

- A diamond dealer's license entitling the holder to carry on business as a buyer, seller, importer or exporter of unpolished diamonds.
- A diamond beneficiation license entitling the holder to polish diamonds for the purpose of business or trade, and to set unpolished diamonds in tools, implements or other articles, or to crush and alter those diamonds for the purpose of trade.
- A diamond trading house license entitling the holder to facilitate the buying and selling of unpolished diamonds locally on premises registered as a "diamond trading house".
- A diamond research license entitling the holder to do applied research and tests in connection with diamonds, but not to polish diamonds for the purpose of business or trade.

In order for the Regulator to consider any submission to be an application for a license, the documents listed in Table 2 must be submitted together with an application form.

The Amendments provide for the following permits and certificates:

- A temporary diamond buyer's permit entitling a person who does not hold a license to buy an unpolished diamond from a diamond exchange and export centre, where diamonds are offered before they can be registered for export.
- A certificate entitling the holder to be in possession of an unpolished diamond obtained in a lawful manner.
- ➤ A special permit entitling a person to sell, export or import an unpolished diamond under prescribed conditions. This is a stringently controlled permit granted only on merit.

Any exporter who desires to register an unpolished diamond for export must, at a prescribed export centre, furnish the registering officer with a return on the prescribed form in respect of that diamond.

TABLE 2: DOCUMENTS REQUIRED FOR LICENSE APPLICATIONS.

	NATURAL PERSON (PRIVATE CAPACITY)	JURISTIC PERSONS (COMPANIES)	NON-SA
Tax Clearance certificate	V	√	n/a
Curriculum Vitae	√	1	√
Certified copy of ID and/or passport	√	√	√
Proven knowledge of unpolished diamonds	√	√	√
Application fee	√	√	√
A summary of proposed business activities	V	1	√
Founding statement or certificate of incorporation	n/a	√	V
Particulars of shareholders	n/a	V	√
Police Clearance in respect of country of origin	n/a	n/a	V
Work/residence permit	n/a	n/a	V
Proof of local partner with minimum 50% shareholding	n/a	n/a	V
Documented proof of collateral in SA	n/a	n/a	V

An export duty is levied on unpolished natural diamond exports, unless an exemption in terms of section 63 of the Diamonds Act is granted. A levy of 0.17 percent of the fair market value of an unpolished diamond is also imposed on diamonds exported from South Africa.

Unpolished synthetic diamonds are also controlled by the Amendments in terms of possession, sale, purchase, processing and exports. Possession is restricted to the manufacturer of a particular diamond, and to licensees and permit holders. The export and import of synthetic diamonds are handled in

the same way as natural diamonds, except that export duty and export levy are not payable.

All unpolished diamonds exported from, or imported into the Republic of South Africa must be accompanied by a Kimberley Process Certificate. This is a forgery resistant document with a particular format which identifies a shipment of rough diamonds as being in compliance with the requirements of the Kimberley Process Certification Scheme (KPCS).

4. THE KIMBERLEY PROCESS CERTIFICATION SCHEME

The Kimberley Process (KP) is a joint governments, industry and civil society initiative to stem the flow of conflict diamonds – rough diamonds used by rebel movements to finance wars against legitimate governments. The trade in these illicit stones has fuelled decades of devastating conflicts in countries such as Angola, Cote d'Ivoire, the Democratic Republic of the Congo and Sierra Leone. The Kimberley process started when Southern African diamond-producing states met in Kimberley, South Africa, in May 2000, to discuss ways to stop the trade in 'conflict diamonds' and ensure that diamond purchases were not funding violence.

In December 2000, the United Nations General Assembly adopted a landmark resolution supporting the creation of an international certification scheme for rough diamonds. By November 2002, negotiations between governments, the international diamond industry and civil society organisations resulted in the creation of the Kimberley Process Certification Scheme (KPCS), which imposes extensive requirements on its members to enable them to certify shipments of rough diamonds as 'conflict-free'. The KPCS document sets out the requirements for controlling rough diamond production and trade. The Scheme entered into force in 2003, when participating countries started to implement its rules. As of August 2013, the KP had 54 members, representing 81 countries, with the European Union and its 28 member states counting as an individual participant, the European Commission.

The KP is open to all countries that are willing and able to implement its requirements. It is chaired, on a rotating basis, by participating countries. South Africa was the inaugural chair in 2003 and also assumed the responsibility in 2013, followed by China in 2014, Angola in 2015 and the UAE in 2016. KP participating countries, industry and civil society observers gather twice a year at intercessional and plenary meetings, as well as in working groups and committees that meet on a regular basis. Implementation is monitored through 'review visits' and annual reports as well as by regular exchange and analysis of statistical data.

The KPCS has evolved into an effective mechanism for stemming the trade in conflict diamonds and is recognized as a unique conflict-prevention instrument to promote peace and security. The joint efforts of governments, industry leaders and civil society representatives have enabled the KP to curb successfully the flow of conflict diamonds in a very short period of time. Diamond experts estimate that conflict diamonds now represent a fraction of one percent of the international trade in diamonds, compared to estimates of up to 15% in the 1990s. That has been the KP's most remarkable contribution to a peaceful world, which should be measured not in terms of carats, but by its effects on people's lives.

The KP has done more than just stem the flow of conflict diamonds, it has also helped stabilize fragile countries and supported their development. As the KP has made life harder for criminals, it has brought large volumes of diamonds onto the legal market that would not otherwise have made it there. This has increased the revenues of poor governments, and helped them to address their countries' developmental challenges.

5. OPERATING DIAMOND MINES IN SOUTH AFRICA

More than 150 diamond-mining operations reported to the Department of Mineral Resources in 2015. However, most of such lease areas were smallscale diamond operations or diggings, while others were no longer As a result, only 98 operations actually produced rough operational. diamonds in 2015. The following section lists diamond operations of producers that contributed at least 0.1 percent to South Africa's total diamond production in 2015, based on statistics received by the Directorate Mineral Economics. Combined, the profiled operations contributed approximately 99 percent to the country's total rough diamond output, and 90 percent to the diamond sector employment. Operations are profiled according to their location, ownership, mining and geology, output and labour (both 2015) as well as future prospects. Details for other operations can be found in the **OPERATING** D1/2016: **MINES** AND **QUARRIES** AND MINERAL PROCESSING PLANTS IN THE REPUBLIC OF SOUTH AFRICA, also available free of charge from the Directorate Mineral Economics. A selection of publications, inclusive of D1/2016, are also available for downloading on the DMR website: www.dmr.gov.za.

Controlling Company	Operations and Locations	Ownership	Mining and Geology	Output and Labour	Prospects	Contact Details
Alexkor Ltd.	Alexkor Mines. Namaqualand,	Pooling and sharing JV	Opencast mining on diamondiferous	52831 cts. 396 emp.	The short to medium term strategic focus	Tel: 027 831 8308
8A Jelicoe Avenue Rosebank 2196 Tel: +2711 788 8809 Fax: +2711 788 8869 www.alexkor.co.za	Northern Cape province.	between Alexkor and the Richtersveld community.	alluvial and marine gravels along the west coast of SA.	51 912 obs	is to ensure commercial viability, sustainability and fulfillment of developmental aims.	Fax: 027 831 1194 stephanier@alexkor.co.za
ASA Resource Group Plc (previously Mwana Africa Holdings). Block C, Peacock House 21 Woodlands Drive Woodmead, Johannesburg 2191 Tel: 011 883 9550 Fax: 011 883 9511 www.asaukplc.com	Klipspringer Diamond mine. 35 km South of Polokwane, Limpopo province.	65% ASA, 35% Naka Diamond Mining.	Underground mining of kimberlite fissures and blows.	51 842 cts. 41 emp.	N/A	Tel: 011 883 9550 Fax: 011 883 9511 henk@jagersfontein.co.za
De Beers Consolidated Mines (DBCM). Cnr Crownwood Rd & Diamond Dr. Theta/Booysens Reserve P/Bag X01 Southdale 2193 Tel: +2711 374 7000	Venetia mine. 80 km west of Musina, Limpopo province.	Wholly owned by DBCM.	Opencast mining of 2 of the 12 kimberlites that form the Venetia cluster.	3 131 768 cts. 4 384 emp.	The underground project is well underway, with shaft sinking to be completed by the start of 2018. To commence operation by 2021 and extend LOM to 2043.	Tel: 015 534 9176 Fax: 015 534 2019 thabo.kekana@debeersgroup.com
Fax: +2711 374 7700 www.debeersgroup.com	Voorspoed mine. 30 km north-east of Kroonstad, Free State province.	Wholly owned by DBCM.	Underground mining of low grade kimberlite pipe accompanied by hypabyssal sills and dykes.	704 184 cts. 1 097 emp.	N/A	Tel: 056 216 8431 Fax: 056 216 8542 gregory.petersen@debeersgroup.com

Controlling Company	Operations and Locations	Ownership	Mining and Geology	Output and Labour	Prospects	Contact Details
Diamcor Mining Inc (DMI). #630-1620 Dickson Avenue Kelowna BC, V1Y 9Y2 Tel: +250 862 3212 Fax: +250 862 3214 www.diamcormining.com	Krone-Endora mine. Adjacent to Venetia mine, 500km NE of Johannesburg, Limpopo province.	70% DMI, 30% Nozala Investments (Pty) Ltd.	Surface minig of alluvial/eluvial deposits.	4 150 cts. 88 emp.	The Company continues to advance efforts aimed at facilitating the processing of material in the +26.0mm size fractions at increased levels.	Tel: 072 509 0969 Fax: na rdepretto@diamcormining.com
DiamondCorp Plc. Third Floor 48 Gresham Street London, EC2V 7AY United Kingdom Tel: +4420 3151 0970 Fax: +4420 3151 0971 www.diamondcorp.plc.uk	Lace Diamond mine. 200km SW of Johannesburg, near Kroonstad, Free State province.	74% DiamondCorp, 26 % BEE partners including Sphere Investments and Shanduka Resources.	Open-cast mining of the upper level volcanoclastic kimberlite and deeper coherent kimberlite facies.	3 165 cts. 311 emp.	Ramp up of commercial production continues.	Tel: 056 216 1303 Fax: 086 532 5344 andre.labuscchagne@diamondcorp.plc.uk
J&B Delwery.	Klipdam Diamond Mining. In Barkley West, Northern Cape province.	Wholly owned by Jagersfontein Developments (Pty) Ltd.	Opencast mining on diamondiferous alluvial deposits.	5 950 cts. 165 emp.	N/A	Tel: 053 050 0029 Fax: 053 050 0119 dirk@wasp-sa.co.za
Jagersfontein Developments (PTY) Ltd. Groot Paardevlei 29 Magnolia Street Somerset West 7130 Tel: 021 913 9745 Fax: 021 855 9066	Jagersfontein Developments. In Fauresmith, Free State province.	Wholly owned by Jagersfontein Developments (Pty) Ltd.	Opencast mining on diamondiferous kimberlite pipe.	251 107 cts. 144 emp.	N/A	Tel: 021 913 9745 Fax: 021 855 9066 henk@jagersfontein.co.za

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Controlling Company	Operations and	Ownership	willing and declogy	Output una	Prospects	Contact Details

	Locations			Labour		
Petra Diamonds.	Cullinan Diamond	74% Petra, 14%	Underground	647 809 cts.	C-Cut Phase 1	Tel: 012 305 2325
Silverpoint Office Park	<i>mine</i> . 40 km east of	Thembinkosi Mining	mining of hyperbyssal	1 750 emp.	Expansion project has secured the	Fax: 012 305 2661
Block 3	Pretoria, Gauteng	Investments,	kimberlite pipe.		mine's lifespan well	DanD@petradiamonds.com
22 Ealing Crescent	province.	12 % Petra			beyond its former	
Bryanston		Employee Share			2016 closure date at	
2021		Trust (PEST).			double its	
Tel: +2711 702 6900					production capacity.	
Fax: +2711 706 3071	Ekapa Mining	50.1% Ekapa	Retreating of	836 865 cts.	Acquired from De	Tel: 0538387355
www.petradiamonds.com	(previously Kimberley mines).	Mining, 49.9% Petra.	tailings dumps.	878 emp.	Beers with effect from 18 Jan 2016.	Fax: 0538394140
	Kimberley, Northern Cape province.				Forms part of the Kimberley Ekapa JV.	cecilliaj@petradiamonds.com
	Finsch mine.	74% Petra,	Underground	2 038 111	A development plan	Tel: 053 385 2484
	165 km west of Kimberley, near Lime	21% Senakha Diamond	mining of a diamondiferous	cts. 2 325 emp.	is currently underway to lift	Fax: 053 385 2304
	Acres, Northern Cape province.	Investments, 5% PEST.	kimberlite pipe.		production to over 2 Mct pa by FY 2017.	adelle.rainier@petradiamonds.com
					,	
	Kimberley	74% Petra,	Underground	176 918 cts.	Incorporated into	Tel: 053 802 0705
	Underground mines. In Kimberley,	26% Sedibeng Mining.	mining of three kimberlite pipes:	638 emp.	the Kimberley Ekapa JV in 2016.	Fax: 053 02 0714
	Northern Cape province.	, and the second	Bultfontein, DuToitspan and			cecilliaj@petradiamonds.com
	p. c.m.cc.		Wesselton.			
	Koffiefontein	70% Petra,	Underground	56 531 cts.	Expansion plans will	Tel: 053 205 5017
	Empowerment JV. 110 km SE of	30% Re-Teng Diamonds.	mining of a cluster of kimberlite pipes	536 emp.	take production to an annual average	Fax: 086 523 5095
	Kimberley, Free State		and dykes, and		steady state of 100	AliceO@petradiamonds.com
	province.		open-cast mining		000 cts by FY 2017.	
			of a satellite pipe			
			named			
			Ebenhaezer.			

Controlling Company	Operations and Locations	Ownership	Mining and Geology	Output and Labour	Prospects	Contact Details
Rockwell Diamonds Inc. Level 1 Wilds View Isle of Houghton Cnr Carlse O'Gowrie & Boundary Roads Houghton Estates	Blue Gum Diamond project. 19 km NW of Ventersdorp, North West province.	Wholly owned by Blue Gum Diamonds (PTY) Ltd, a subsidiary of Rockwell.	Surface mining of three alluvial diamond deposits.	18 667 cts. 186 emp.	N/A	Tel: 053 531 1300 Fax: 086 675 2507 roelieno@rockwelldiamonds.com
Johannesburg 2198 Tel: +2753 531 1300 Fax: +2753 501 6328 www.rockwelldiamonds.com	Niewejaarskraal mine. 57 km SW of Douglas, Northern Cape province.	Wholly owned by Rockwell.	Surface mining of three alluvial gravels on the south bank of the Orange river.	4 550 cts. 214 emp.	Substantial work to be carried out to refine geological model, which will inform a new mine plan.	Tel: 053 531 1300 Fax: 086 675 2507 roelieno@rockwelldiamonds.com
	Saxendrift mine. 58 km SW of Douglas, Northern Cape province.	Wholly owned by Rockwell.	Surface mining of three alluvial gravels on the upper and middle banks of the Orange river.	8 860 cts. 476 emp.	The capacity could be increased to 200 000 cm ³ a month.	Tel: 053 531 1300 Fax: 086 675 2507 roelieno@rockwelldiamonds.com
Rooipoort Developments (Pty) Ltd.	Rooipoort Developments. Kimberley, Northern Cape province.	Wholly owned by Rooipoort Developments.	Surface mining on alluvial deposits.	17 571 cts. 181 emp.	N/A	Tel: 021 913 9745 Fax: 021 855 9066 henk@jagersfontein.co.za
Scarlet Sun (Pty) Ltd.	Scarlet Sun. Barkley West, Northern Cape province.	Wholly owned by Scarlet Sun.	Surface mining on alluvial deposits.	33 183 cts. 435 emp.	N/A	Tel: 053 832 8129 Fax: 053 832 7358 yasteenkamp@gmail.com

Controlling Company	Operations and Locations	Ownership	Mining and Geology	Output and Labour	Prospects	Contact Details
Sedi Diamonds	Sedibeng Diamond mine JV. Barkley West, Northern Cape province. Star Diamonds.		Underground mining of kimberlite fissures. Underground	11 609 cts. 276 emp. 8 997 cts.	N/A	Tel: 083 628 2700 Fax: na marco.moller@frontiermining.co.za
	Star Blamonas.		mining of kimberlite fissures	160 emp.	NyA	
Transhex. 405 Voortrekker Rd Parow 7500 Tel: +2721 937 2000 Fax: +2721 937 2100	Transhex Bedrywe (Baken and Bloeddrif). Near Alexander Bay, Northern Cape province.	Wholly owned by Transhex.	Surface mining of alluvial diamond deposits on the banks of lower Orange (Baken) and further upriver (Bloeddrif).	45 878 cts. 615 emp.	Mining to focus on shallow deposits and lower grade stockpiles.	Tel: 021 937 2000 Fax: 021 937 2100 thysv@transhex.co.za
www.transhex.co.za	Transhex Bedrywe (Klipvlei, De Punt, Strykloof, Bethel, Seegebied 5A, 7A, 12A & 13A). Off the west-coast of SA.	Wholly owned by Transhex.	Marine diamond mining off the west coast of SA.	6 842 cts. 99 emp.	N/A	Tel: 021 937 2000 Fax: 021 937 2100 thysv@transhex.co.za
Bluedust 7	Vanzoelenslaagte. In Barkley West, Northern Cape province.	Wholly owned by Bluedust 7.	Surface mining of alluvial diamond deposits.	4 150 cts. 88 emp.	N/A	Tel: 053 832 8129 Cell: 082 593 3832 Fax: 053 832 7358 yasteenkamp@gmail.com

OTHER USEFUL CONTACT DETAILS

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