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Today the Canada-based Khan Resources Inc. (KRI) owns a 69% share in the Dornod project, mostly through its 58% subsidiary Central Asian Uranium Co. Ltd (CAUC). Russia's Priargunsky Mining & Chemical Enterprise (a subsidiary of Rosatom) and the Mongolian government each own 21% of CAUC, which holds the only uranium mining licence in Mongolia. A bankable feasibility study has confirmed the viability of the project, the capital cost estimate being USD 333 million and first production possibly in 2012. A definitive feasibility study released in March 2009 showed that the project was sound, on the basis of 24 780 tU indicated resources (NI 43-101 compliant), including 20 340 tU probable reserves. Annual production of 1 150 tU over 15 years is envisaged. In July 2009, the Mineral Resources and Petroleum Authority of Mongolia (MRPAM) suspended for three months the CAUC mining licence due to alleged violations of Mongolian laws.

Khan was granted a 3-year exploration licence by the MRPAM in early 2008 covering part of the Dornod orebody, and was applying to have this converted into a mining licence contiguous with that held by CAUC. Khan also holds 100% of an exploration license covering an adjoining "Additional Dornod property". In March 2009, Khan was reported as holding 58% of the No. 2 deposit and two thirds of No. 7 deposit (possibly via CAUC), and 100% of the remaining third of the No. 7 deposit, giving it 69% of the overall uranium resource. The company is aiming to negotiate an investment agreement with the government as soon as possible, and engineering is then likely to take three years to start up.

Gurvanbulag was the site of extensive underground development to 560 metres in the Soviet era. It has been held by the Canada-based Western Prospector Group Ltd since 2004 as the main focus of its Saddle Hills project. A recent NI 43-101 inferred resource figure based partly on Russian exploration to 1989 amounts to 9 000 tU. Western Prospector and its Mongolian subsidiary, Emeelt Mines, undertook a definitive feasibility study which showed that the project is barely economic, on the basis of 6 900 tU reserves averaging 0.137%U. With radiometric sorting the head grade would be 0.152%U and the mine could produce 700 tU/yr for 9 years. Mine development cost would be about US\$ 280 million. It is located about 30 km west of Dornod and only 100 km from the Chinese border.

In mid 2008, KRI made a bid to take over the Western Prospector Group so as "to consolidate its position in the Saddle Hills district" but was outbid by Tinpo Holdings, who subsequently withdrew the offer due to political uncertainty. In March 2009, Western Prospector agreed to a USD 25 million takeover by China's CNNC International, a 74% subsidiary of CNNC Overseas Uranium Holding Ltd and through it, of SinoU. In June 2009, 69% of the shares had been taken over by CNNC. In July 2009, MRPAM suspended for three months all of the company's uranium exploration licences due to alleged violations of Mongolian laws.

Mardai is another deposit in this area, close to Dornod, and possibly held by Khan Resources. The Erdes Mining Enterprise, a Russian-Mongolian joint venture, opened of the Mardai open pit mine in 1988. The ore was railed to Krasnokamensk in Siberia for treatment at the Priargunsky mill until 1993. Total production appears to have been about 600 tU. The town was reported to house 10 000 Russian workers at the mine. There are three separate deposits with the government reporting 60 000 tU in total.

Canada's Denison Mines has a 70% interest in the Gurvan Saihan Joint Venture (GSJV), with the Government of Mongolia and a Russian partner, and also holds leases though its Mongolian affiliate International Uranium Mongolia XXK (IUM). GSJV has focused on defining resources amenable to ISL mining, and it holds interests in several Mongolian properties. In 2007, NI 43-101 resource figures were published for some of these. Indicated and inferred resources of 4 400 tU are quoted for Hairhan, and 2 400 tU Haraat.

In 2007, Century City entered into an agreement with China Nuclear Energy Industry Corp. (CNEIC), a subsidiary of CNNC, to explore and develop uranium resources on its leases in eastern Mongolia.

Red Hill Energy and Mega Uranium hold a number of exploration licences including the Emeelt, Khashaat and Bagamurat deposits 350 km southeast of Ulaan Baatar, and Jargalan, 500 km west of the city.

In April, 2008 Russia and Mongolia signed a high-level agreement to cooperate in identifying and developing Mongolia's uranium resources, and this aims to restore and consolidate Russia's influence in Mongolia's uranium sector. Russia is also examining the feasibility of building nuclear power plants in Mongolia.

In December 2008, the Japanese trading company Marubeni acquired rights to conduct feasibility studies on three uranium deposits, including Dornod and Gurvanbulag, developed by KRI and Western Prospector, and Mardai. The company plans to invest USD 430 million and has signed a letter of intent with Khan. It is perceived that the laws of the mining-dependent country have become increasingly protectionist in the recent years, and the President has announced that "the country aims to decide on state ownership rules for strategic mineral deposits by mid-2009." Khan Resources commented that "We are excited by Marubeni's interest in Khan's Dornod uranium project and are optimistic about the positive influence Japanese investors have on the Mongolian mining investment environment. Marubeni will work to improve the mining investment climate in Mongolia."

URANIUM RESOURCES

The uranium resources of Mongolia occur in the six deposits including Dornod, Gurvanbulag, Mardain-gol, Nemer, Haraat, Hairhan and Ulaan Nuur. The recoverable uranium resources in Mongolia attributable to category RAR + Inferred amounted to 49 300 tU. RAR amounts to 37 500 tU at a cost <USD 260/kgU. The majority of such resources may be mined using the conventional underground mining method. Inferred uranium resources amount to 11 800 tU recoverable at a cost of <USD 260/kgU. These resources may be mined using conventional mining methods and ISL. Prognosticated and Speculative resources are estimated to amount to 1.4 million tU.

The Dornod deposit is located in the Dornod volcano-tectonic structure which is filled with Mesozoic volcanic flows and sediments. The uranium mineralisation extends over an area of 20 km² and is concentrated in thirteen orebodies, ore shoots and stockworks. The uranium mineralisation consists of pitchblende, coffinite, and brannerite, as well as uranium bearing leucoxene. The average ore grade is about 0.11% U.

The Gurvanbulaag deposit is associated with the same Dornod volcano-tectonic structure. Here, the structure includes two rock types. A lower, 300-400 m thick series consisting of volcanic flows ranging in composition from rhyolite to andesitic basalts, interlayered with tuffaceous sediments. The upper, 300-800 m thick series includes acid effusive volcanics and their tuffaceous equivalents. The uranium mineralisation, including coffinite, pitchblende and uranophane, is reported to be controlled both by lithology of the host rocks (preferably tuffaceous ashes) and favorable structures. It extends over a depth ranging from 15-40 m to 720 m. The highest grade ore is concentrated in a zone affected by low-angle faulting, at the contact between the lower and upper series. Stratiform orebodies are spread over 3 km². These orebodies also appear to be controlled by tectonic features. A total of

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17 orebodies of different sizes have been found. The highest grade ore covers about 1 500 m² with an average thickness of 3.5 m and an average grade of 0.17%U.

The Mardain-gol and Nemer deposits are also associated with the Dornod structure. They are geologically similar to the Dornod and Gurvanbulag deposits. The Haraat and Hairhan sandstone deposits occur in the upper portion of lower Cretaceous sediments of the Choir basin which overlies Proterozoic crystalline schists, gneisses and marbles intruded by Paleozoic granitoids. The ore occurs in alternating sandstone and clays, with interbedded lignitic layers. These rocks were originally geochemically reduced but are now oxidised to a depth of 25-30 m. The mineralisation occurs in this oxidised environment. Common minerals include autunite, torbernite and schroeckingerite. Associated elements include cerium, lanthanum, scandium, yttrium, ytterbium, rhenium, germanium, molybdenum and silver.

In addition to the resources associated with the Choir basin, other sedimentary basins in the Eastern Gobi district have a potential to host uranium deposits. One of them includes the Ulaan Nuur deposit.

URANIUM PRODUCTION

Historical review

Uranium production in Mongolia started with operation of the Dornod open pit mine in the Mardai-gol district in 1989, based on the known uranium resources in the Dornod and Gurvanbulag deposits. Both open pit and underground mines were developed. This operation has a design capacity of 2 000 0001 ore/year. Assuming an ore grade of 0.12%U, this equals a mining production capability of 2 400 tU/year. Mongolia has no processing facilities. The ores mined in the Mardai-gol district have been transported by rail 484 km to the Priargunsky Mining and Processing Combinate in Krasnokamensk, Russia, for processing. The mines have been operated by the Erdes Mining Enterprise, a joint venture between Mongolia and the Russian Federation. Marketing was done by Techsnabexport. Due to the political and economical changes both in Mongolia and the neighbouring areas of Russia, uranium production of Erdes was terminated in 1995. The historical uranium production between 1989 and 1995 was 535 tU.

Future production centres

In 2009, Khan Resources Inc. prepared a Definitive Feasibility Study (DFS) for its Dornod Project which comprises several uranium deposits and some infrastructure. The DFS shows a positive economic outcome, based on development of underground and open-pit mines, producing a total of approximately1 225 000 t of ore per year, at a rate of 3 500 t/d. Metallurgical recovery is 84.86%-89.28% The capital cost for mining and surface facilities is estimated at almost USD 333 million, with operating costs of USD 23.22/lb U₃O₈ (USD 60.32/kgU). The start of the development activities depends on receiving Government of Mongolia approval for the project.

URANIUM REQUIREMENTS

Mongolia has no reactor-related requirements since it has no reactors and no firm plans to develop nuclear generating capacity.

NATIONAL POLICIES RELATING TO URANIUM

The mining sector is Mongolia's single largest industry, accounting for 55% of industrial output and more than 40% of export earnings. In 2008 the government established a new Ministry of Mines and Energy. Mining was previously a division of the Ministry of Industry and Trade.

The Nuclear Energy Agency of the Government of Mongolia is responsible for development of policy for activities relating to the development of nuclear research and technology, radiation protection and safety, use of radiation sources and the coordination of uranium mining activity with other relevant organisations. The Nuclear Energy Agency is attached to the Prime Minister's office and is the national focal point for dealing with the IAEA. Its main functions include co-ordination of nuclear research activities in the country and implementation of nuclear regulatory activities.

Prior to 1996 radiation protection and safety was covered under Law on Health Protection (1977), Basic Regulation on Radiation Sanitation (1983), and Radiation Safety Standards (1983). The Law of "Radiation Protection and Safety" was enacted on 21 June 2001 and amended on 2 January 2003. The Law on "Nuclear-Weapon-Free Status" was enacted on 3 February 2000. Transport Regulation for Radioactive Sources was enacted in 1987.

On 16 July 2009, the Mongolian Parliament passed the Nuclear Energy Law to regulate the exploration, exploitation and development of uranium and other radioactive materials. The new law came into effect on 15 August 2009. A draft the code of practice on waste management and regulation is now under review.

The Nuclear Energy Law gives the Mongolian government the right to take ownership without payment of not less than 51% of the shares of a project or joint venture if the uranium mineralisation was discovered by state funded exploration, and not less than 34% if state funding was not used to find the mineralisation.

The law gives the State Administrative Authority the responsibility to implement and enforce state policy on the exploration and development of deposits of radioactive minerals and nuclear energy, including the power to grant, suspend or revoke any licences granted pursuant to the Nuclear Energy Law. The Nuclear Energy Law mandates that licences be obtained to conduct exploration for and production of radioactive minerals.

To obtain an exploration licence an applicant must conduct its activities in a transparent manner, have the financial resources to support exploration and reclamation, conduct responsible programs, and have demonstrated mining experience. Exploration licences will only be issued to applicants that meet the conditions set out in the Nuclear Energy Law, and agree to accept the state ownership of the required percentage of shares.

The Mongolian Parliament also passed enabling legislation regarding the re-registration of existing exploration and mining licences. Existing licence holders must apply to the State Administrative Authority by 15 November 2009 and comply with all of the conditions and requirements set out in the Nuclear Energy Law, including acceptance of the state's 34%-51% share participation in the licence holder.

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Uranium exploration and development expenditures and drilling effort – domestic

Expenses in US dollars	2006	2007	2008	2009 (expected)
Industry* exploration expenditures (foreign investment companies)	12 520 495.6	26 125 153.67	29 585 511.69	19 120 436.7
Industry* exploration expenditures (national investment companies)	6 940.2	13 114.13	63 736.39	58 020.9
Government exploration expenditures	0	0	0	0
Industry* development expenditures	0	0	0	0
Government development expenditures	0	0	0	0
Total expenditures	12 527 435.81	26 138 267.8	29 649 248.0	19 178 457.61
Industry* exploration drilling (m) (foreign investment companies)	166 365	179 516	172 501.3	NA
Industry* exploration drilling (m) (national investment companies)	894.0	NA	167.9	NA
Industry* exploration holes drilled (foreign investment companies)	NA	NA	812	NA
Industry* exploration holes drilled (national investment companies)	NA	NA	2	NA
Government exploration drilling (m)	0	0	0	0
Government exploration holes drilled	0	0	0	0
Industry* development drilling (m)	NA	NA	NA	NA
Industry* development holes drilled	NA	NA	NA	NA
Government development drilling (m)	0	0	0	0
Government development holes drilled	0	0	0	0
Subtotal exploration drilling (m)	167 259	170 637	172 669.2	NA
Subtotal exploration holes drilled	NA	NA	814	NA
Subtotal development drilling (m)	NA	NA	NA	NA
Subtotal development holes drilled	NA	NA	NA	NA
Total drilling (m)	167 259	170 637	172 669.2	NA
Total holes drilled	NA	NA	NA	NA

^{*} Non-government.

Reasonably Assured Conventional Resources by production method (tonnes U)

Production method	<usd 40="" kgu<="" th=""><th><usd 80="" kgu<="" th=""><th><usd 130="" kgu<="" th=""><th><usd 260="" kgu<="" th=""><th>Recovery factor (%)</th></usd></th></usd></th></usd></th></usd>	<usd 80="" kgu<="" th=""><th><usd 130="" kgu<="" th=""><th><usd 260="" kgu<="" th=""><th>Recovery factor (%)</th></usd></th></usd></th></usd>	<usd 130="" kgu<="" th=""><th><usd 260="" kgu<="" th=""><th>Recovery factor (%)</th></usd></th></usd>	<usd 260="" kgu<="" th=""><th>Recovery factor (%)</th></usd>	Recovery factor (%)
Underground mining	0	28 100	28 100	28 100	
Open-pit mining	0	7 300	7 300	7 300	
In situ leaching	0	2 100	2 100	2 100	
Co-product and by-product	0	0	0	0	
Unspecified	0	0	0	0	
Total	0	37 500	37 500	37 500	

Reasonably Assured Conventional Resources by processing method (tonnes U)

Processing method	<usd 40="" kgu<="" th=""><th><usd 80="" kgu<="" th=""><th><usd 130="" kgu<="" th=""><th><usd 260="" kgu<="" th=""><th>Recovery factor (%)</th></usd></th></usd></th></usd></th></usd>	<usd 80="" kgu<="" th=""><th><usd 130="" kgu<="" th=""><th><usd 260="" kgu<="" th=""><th>Recovery factor (%)</th></usd></th></usd></th></usd>	<usd 130="" kgu<="" th=""><th><usd 260="" kgu<="" th=""><th>Recovery factor (%)</th></usd></th></usd>	<usd 260="" kgu<="" th=""><th>Recovery factor (%)</th></usd>	Recovery factor (%)
Conventional	0	35 400	35 400	35 400	90
In-place leaching*	0	0	0	0	
Heap leaching**	0	0	0	0	
In situ leaching	0	2 100	2 100	2 100	70
Unspecified	0	0	0	0	
Total	0	37 500	37 500	37 500	

- * Also known as stope leaching or block leaching.
- ** A subset of open-pit and underground mining, since it is used in conjunction with them.

Reasonably Assured Conventional Resources by deposit type (tonnes U)

Deposit type	<usd 40="" kgu<="" th=""><th><usd 80="" kgu<="" th=""><th><usd 130="" kgu<="" th=""><th><usd 260="" kgu<="" th=""></usd></th></usd></th></usd></th></usd>	<usd 80="" kgu<="" th=""><th><usd 130="" kgu<="" th=""><th><usd 260="" kgu<="" th=""></usd></th></usd></th></usd>	<usd 130="" kgu<="" th=""><th><usd 260="" kgu<="" th=""></usd></th></usd>	<usd 260="" kgu<="" th=""></usd>
Unconformity-related	0	0	0	0
Sandstone	0	2 100	2 100	2 100
Hematite breccia complex	0	0	0	0
Quartz-pebble conglomerate	0	0	0	0
Vein	0	0	0	0
Intrusive	0	0	0	0
Volcanic and caldera-related	0	35 400	35 400	35 400
Metasomatite	0	0	0	0
Other*	0	0	0	0
Total	0	37 500	37 500	37 500

^{*} Includes surficial, collapse breccia pipe, phosphorite and other types of deposits, as well as rocks with elevated uranium content. Pegmatite, granites and black shale are not included.

Inferred Conventional Resources by production method (tonnes U)

Production method	<usd 40="" kgu<="" th=""><th><usd 80="" kgu<="" th=""><th><usd 130="" kgu<="" th=""><th><usd 260="" kgu<="" th=""><th>Recovery factor (%)</th></usd></th></usd></th></usd></th></usd>	<usd 80="" kgu<="" th=""><th><usd 130="" kgu<="" th=""><th><usd 260="" kgu<="" th=""><th>Recovery factor (%)</th></usd></th></usd></th></usd>	<usd 130="" kgu<="" th=""><th><usd 260="" kgu<="" th=""><th>Recovery factor (%)</th></usd></th></usd>	<usd 260="" kgu<="" th=""><th>Recovery factor (%)</th></usd>	Recovery factor (%)
Underground mining	0	1 600	3 200	3 200	95
Open-pit mining	0	0	0	0	
In situ leaching	0	2 700	0	0	70
Co-product and by-product	0	0	0	0	
Unspecified	0	0	5 900	5 900	70
Total	0	4 300	11 800	11 800	

Mongolia

Inferred Conventional Resources by processing method

(tonnes U)

Processing method	<usd 40="" kgu<="" th=""><th><usd 80="" kgu<="" th=""><th><usd 130="" kgu<="" th=""><th><usd 260="" kgu<="" th=""><th>Recovery factor (%)</th></usd></th></usd></th></usd></th></usd>	<usd 80="" kgu<="" th=""><th><usd 130="" kgu<="" th=""><th><usd 260="" kgu<="" th=""><th>Recovery factor (%)</th></usd></th></usd></th></usd>	<usd 130="" kgu<="" th=""><th><usd 260="" kgu<="" th=""><th>Recovery factor (%)</th></usd></th></usd>	<usd 260="" kgu<="" th=""><th>Recovery factor (%)</th></usd>	Recovery factor (%)
Conventional	0	1 600	3 200	3 200	95
In-place leaching*	0	0	0	0	
Heap leaching**	0	0	0	0	
In situ leaching	0	2 700	2 700	2 700	70
Unspecified	0	0	5 900	5 900	70
Total	0	4 300	11 800	11 800	

^{*} Also known as stope leaching or block leaching.

Inferred Conventional Resources by deposit type

(tonnes U)

Deposit type	<usd 40="" kgu<="" th=""><th><usd 80="" kgu<="" th=""><th><usd 130="" kgu<="" th=""><th><usd 260="" kgu<="" th=""></usd></th></usd></th></usd></th></usd>	<usd 80="" kgu<="" th=""><th><usd 130="" kgu<="" th=""><th><usd 260="" kgu<="" th=""></usd></th></usd></th></usd>	<usd 130="" kgu<="" th=""><th><usd 260="" kgu<="" th=""></usd></th></usd>	<usd 260="" kgu<="" th=""></usd>
Unconformity-related	0	0	0	0
Sandstone	0	2 700	8 600	8 600
Hematite breccia complex	0	0	0	0
Quartz-pebble conglomerate	0	0	0	0
Vein	0	0	0	0
Intrusive	0	0	0	0
Volcanic and caldera-related	0	1 600	3 200	3 200
Metasomatite	0	0	0	0
Other*	0	0	0	0
Total		4 300	11 800	11 800

^{*} Includes surficial, collapse breccia pipe, phosphorite and other types of deposits, as well as rocks with elevated uranium content. Pegmatite, granites and black shale are not included.

Historical uranium production by production method

(tonnes U in concentrate)

Production method	Total through end of 2005	2006	2007	2008	Total through end of 2008	2009 (expected)
Open-pit mining*	535	0	0	0	535	0
Underground mining*	0	0	0	0	0	0
In situ leaching	0	0	0	0	0	0
Co-product/by-product	0	0	0	0	0	0
Total	535	0	0	0	535	0

^{*} Pre-2006 totals may include uranium recovered by heap and in-place leaching.

^{**} A subset of open-pit and underground mining, since it is used in conjunction with them.

Historical uranium production by processing method

(tonnes U in concentrate)

Processing method	Total through end of 2005	2006	2007	2008	Total through end of 2008	2009 (expected)
Conventional	535	0	0	0	535	0
In-place leaching*	0	0	0	0	0	0
Heap leaching**	0	0	0	0	0	0
In situ leaching	0	0	0	0	0	0
U recovered from phosphates	0	0	0	0	o	0
Other methods***	0	0	0	0	0	0
Total	535	0	0	0	535	0

- * Also known as stope leaching or block leaching.
- ** A subset of open-pit and underground mining, since it is used in conjunction with them.
- *** Includes mine water treatment and environmental restoration.

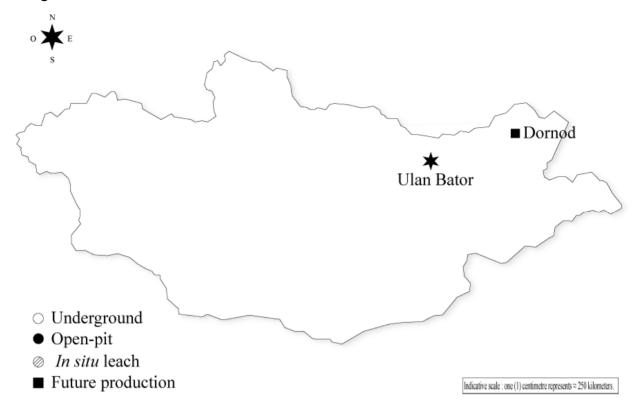
Historical uranium production by deposit type

(tonnes U in concentrate)

Deposit type	Total through end of 2005	2006	2007	2008	Total through end of 2008	2009 (expected)
Unconformity-related	0	0	0	0	0	0
Sandstone	0	0	0	0	0	0
Hematite breccia complex	0	0	0	0	0	0
Quartz-pebble conglomerate	0	0	0	0	0	0
Vein	0	0	0	0	0	0
Intrusive	0	0	0	0	0	0
Volcanic and caldera- related	535	0	0	0	535	0
Metasomatite	0	0	0	0	0	0
Other*	0	0	0	0	0	0
Total	535	0	0	0	535	0

^{*} Includes surficial, collapse breccia pipe, phosphorite and other types of deposits, as well as rocks with elevated uranium content. Pegmatite, granites and black shale are not included.

Mongolia/Namibia



• Namibia*

URANIUM EXPLORATION AND MINE DEVELOPMENT

Historical background

See the 2007 Red Book for additional details.

The new millennium upward trend in uranium prices has stimulated extensive exploration activity, mainly in the Namib Desert. Two major types of deposits have been targeted; the intrusive type, associated with Alaskite, as at Rössing, and the surficial, calcrete type, as at Langer Heinrich.

Substantial growth in uranium exploration has occurred in Erongo area of west-central Namibia, focusing mainly on previously-known deposits with considerable historical data. Over 60 exploration licences had been issued up until early 2007, when a moratorium on new licences was imposed by the Namibian government.

^{*} Report prepared by the Secretariat, and based on information contained in company reports.

Geology

A comprehensive review of Namibia's uranium geology and exploration is found in:

Mineral Resources of Namibia, *Nuclear and Fossil Fuels – Uranium*, by H. Roesener and C.P. Schreuder, Section 7, pp. 1-62, www.mme.gov.na/gsn/pdf/uranium.pdf.

Recent and ongoing uranium exploration and mine development activities

Rössing

Recent exploration in the Rössing mine area has focussed on uranium occurrences within the mining license area that have been known since the late 1970s. Drilling on the SH and SK anomalies totalled 70 000 m between 2006 and 2008. A preliminary pit with an extraction ratio of 1:0 has been designed and plant process and capital cost analyses continue through study and design. The potential expansion of operations at the Rössing mine would entail an increase in size of the current mining pit (known as SJ) such that nine individual components of the existing operation would have to be relocated. The proposed development is currently envisaged to occur in two phases:

Phase 1 – Construction of a sulphuric acid manufacturing plant with associated sulphur storage at the mine and the transport of sulphur from the Port of Walvis Bay; construction of a radiometric ore sorting plant and mining of the SK4 ore body.

Phase 2 – Extending the current mining activities in the existing SJ open pit; new mining activity in the larger SK area; increasing waste rock and tailings disposal capacity; establishing an acid heap leaching facility and sulphur handling facility in the Port of Walvis Bay.

Langer Heinrich

The Langer Heinrich Uranium Project is located in the western portion of central Namibia, 80 km east of the major deepwater seaport at Walvis Bay and the coastal town of Swakopmund. An eight-year evaluation period followed the discovery of calcrete hosted uranium mineralisation in the early 1970s. In 1980, Gencor, now part of BHP Billiton, completed an USD 8.5 million full project evaluation study based upon conventional open-pit mining and alkaline extraction This included detailed resource definition and thorough mining, metallurgical and processing investigations for the proposed removal of about 300 000 tonnes of mineralised rock, as well as the construction of a purpose-built pilot plant. The Project was subsequently placed on care and maintenance due to depressed uranium prices.

In 1998, the Project was sold to the Australian listed public company Acclaim Uranium NL who completed a Pre-Feasibility Study, but uranium prices again curtailed further development. In 2002, Acclaim sold its holdings in the Langer Heinrich Uranium (Pty) Ltd to Paladin Resources.

In 2005, a reverse circulation drilling programme was carried out in order to increase confidence in resource modelling and to delineate extensions to known uranium mineralisation in the paleo-channel hosting the mineralisation. In 2006, additional reverse circulation drilling was conducted in the eastern portion of the Langer Heinrich ore body. A further resource definition campaign was started in 2007 with the aim of delimiting all mineralisation within the Langer Heinrich mining lease.

The Ministry of Mines and Energy granted an Exclusive Exploration License (EPL) to Langer Heinrich Uranium (Pty) Ltd in October 2006. The EPL covers 30 km² to the west of and adjoining the Langer Heinrich Mining License (ML140). Exploration in 2007 and 2008 included 3 000 m of reverse

Namibia

circulation drilling, delineation of the additional 5 km palaeo-channel extension on the new tenement to complement the increased production requirements associated with the Stage III Langer Heinrich expansion. In August 2008, it was announced that as a result of its 2007/2008 resource drilling programme an updated ore reserve to support life of mine planning studies would be undertaken.

Proposed Developments

Trekkopje

The Trekkopje deposit (Klein Trekkopje and Trekkopje) occurs as surficial calcrete deposits in basal channel sediments. The geology of the Trekkopje deposits is similar to that of Langer Heinrich. The calcrete host rocks are calcium carbonate-cemented fluvial sediments that were deposited in ancient drainage valleys. The basal channels in the Trekkopje area follow the northeast-trending structural grain of the underlying basement rocks.

In December 1999, UraMin Inc, the parent company of UraMin Namibia, acquired control of the combined deposits. In 2006, UraMin initiated a programme of exploration drilling and in November that year developed a resource estimate for Trekkopje. Uramin Inc. was then taken over by Areva to become Areva Resources Southern Africa, with subsidiary Areva Resources Namibia now developing the mine.

Areva's heap leach project at Trekkopje is about 80 km northeast of Swakopmund and 35 km north of Rössing. In 2007, UraMin Inc announced an upgrade of uranium resources, including occurrences within two adjacent palaeo-channel deposits. In total, resources have been defined over an area of about 16 km by 1 km to 3 km. Some 80% of the ore is found at shallow depth, less than 15 metres below the surface.

The USD 900 million project is a shallow open-pit mine with a sodium carbonate/bicarbonate heap leach process – the first of this kind in the world. In 2009, geotechnical site investigation and the engineering design were completed for a new 30 million-tonne, on-off uranium heap leach pad covering 2.5 km². Water is to be supplied from a coastal desalination plant with about 55 000 m³/day output requiring 16 MWe from the grid. In October 2009, the desalination facility that is to provide water to the plant commenced operations and tests will be carried out until mid-2010, with full production expected in 2011.

Husab

The Rössing South deposit is located about 6-7 kilometres south of the Rössing mine, within the central Damara Orogenic Belt (DOB) in a zone characterised by basement domes, regional folding, faulting, and late Damaran intrusive rocks. The Husab project, which includes the Ida Dome to the south, consists of a series of north-northeast trending regional-scale antiforms and synforms. A zone of uraniferous alaskites outcrop at the northern end of the deposit and trend southwest at shallow depth for some 8 km in what is considered an extension of the Rössing mine stratigraphy.

Perth-based Extract Resources Ltd (Kalahari Minerals 40%; Rio Tinto 15.6%), has been undertaking feasibility studies for mining the Rössing South orebody. Drilling was undertaken along the 15 km strike which lies under a cover of about 50 m of alluvial sand. A resource estimate of Zones 1 and 2 was developed from drilling results compiled between November 2007 and June 2009.

Pre-feasibility studies have been completed of an open pit mining project with output of 5 700 tU/yr. Capital costs are estimated at USD 700 million, with operating costs of USD 61/kgU (USD 23.46/lb U₃O₈). First production is slated for 2013.