

10 January 2011

# DEEP YELLOW RECEIVES POSITIVE INTERIM PRE-FEASIBILITY RESULTS FOR OMAHOLA PROJECT IN NAMIBIA

Deep Yellow Limited (ASX: DYL) has received positive interim Pre-Feasibility Study (PFS) results for its wholly-owned flagship Omahola uranium project in Namibia, which includes the INCA and Tubas Red Sand uranium deposits.

**SNC-Lavalin (SNCL)** are the appointed engineers for the PFS which commenced in March 2010. Key project assumptions and interim results include:

- Production rate of 1,000 tonnes (2.2 Mlbs) U<sub>3</sub>O<sub>8</sub> per annum beginning 2014 and targeting resources to provide a minimum 12 year mine life
- Open-cut mining at the INCA deposit (80% of plant feed) and simplified surface mining and beneficiation at Tubas Red Sand (TRS) deposit (20% of feed)
- Conventional processing plant with crushing, grinding, sulphuric acid leach and solvent extraction followed by uranium precipitation, drying and packaging of yellowcake
- Capital costs estimated to be US\$324 to US\$336 million with 10% contingency
- Operating costs estimated to be US\$24.90 to US\$25.30 per pound U3O8
- Iron (magnetite) anticipated to be produced as saleable by-product
- Sulphuric acid to be partially generated on-site

The timeline for completion of PFS has been extended to the 2nd Quarter 2011 to evaluate the inclusion of material from the recently discovered **Ongolo Alaskite** project as an additional source of ore for the Omahola Project. Ongolo Alaskite offers the potential to increase the production rate and/or extend the life of the project and is:

- alaskite-hosted uranium mineralisation discovered in April 2010
- similar to ore mined and processed at the Rossing Uranium Mine
- metallurgically compatible and similar uranium grade to INCA
- currently being drilled for initial Mineral Resource estimate in March 2011

**Deep Yellow Limited** (ASX Code: **DYL**) is pleased to announce that SNC-Lavalin (SNCL) has provided key assumptions and interim results for the ongoing Pre-Feasibility Study (PFS) on DYL's **Omahola Project** in Namibia, operated by wholly-owned subsidiary **Reptile Uranium Namibia (Pty)** Ltd (RUN)



The PFS was launched in March 2010 and includes the **INCA** and **Tubas Red Sand (TRS)** uranium deposits. These deposits have combined resources containing **8,294 tonnes (18.3 million pounds) U3O8**, with additional resources anticipated from both deposit types.

DYL Managing Director Patrick Mutz said the positive interim results for the PFS highlight the economic potential of the Omahola Project, and, when coupled with the discovery of the new high-grade Ongolo Alaskite uranium deposit, reaffirms the value proposition of DYL's Namibian exploration portfolio for Deep Yellow shareholders.

"We are very pleased with the early results of the pre-feasibility study and look forward to its completion, which is expected in the second quarter of this year," he said

"The ongoing drilling results from the Ongolo Alaskite Project discovered last April have been so positive that we decided to extend the completion of the PFS to incorporate this new high-grade mineralisation as a source of ore for the Omahola Project.

We are confident the inclusion of this newly discovered mineralisation has the potential to positively impact the overall PFS results."

#### Key Project Assumptions and Interim PFS Results

Key project assumptions and interim Omahola Project PFS results include mining by open-cut methods with conventional uranium processing using sulphuric acid. The planned production rate is 1,000 tonnes (2.2 million pounds) U<sub>3</sub>O<sub>8</sub> per annum beginning in 2014, with resources targeted to provide a minimum 12 year mine life and with anticipated phased increases in production as JORC Code Resources are further increased.

Detailed mine planning for the INCA deposit is underway, with the bulk of the mineralisation sufficiently shallow (starting from 20 metres) for open-cut mining.

It is anticipated that a conventional processing plant will be constructed near the INCA deposit which will include crushing, grinding, sulphuric acid leaching, followed by solvent extraction, uranium precipitation, and drying and packaging of yellowcake.

Mining of the TRS deposit will be by simple surface mining techniques as the mineralisation is located from one metre to a maximum depth of approximately 15 metres. A mobile beneficiation plant will be located at the TRS deposit. This satellite plant will be designed to concentrate approximately 90% of the uranium into approximately 25% of the mass, with the resulting concentrate grading +400 ppm U<sub>3</sub>O<sub>8</sub> assumed to be transported via slurry pipeline to the main processing plant near INCA for uranium recovery.

The main processing plant will be equipped with a magnetic recovery circuit at the end of the process to recover magnetite (iron) from the tailings stream. It is anticipated that this iron will be a saleable by-product for use in third party producers' uranium acid leach circuits to enhance uranium extraction.

The main plant will also be equipped with a pressure oxidation autoclave to generate a significant quantity of sulphuric acid on-site from pyrite in the INCA ore, thus reducing the quantity of sulphuric acid required to be purchased and transported to the site.

A conceptual design of the main processing plant is included as Appendix 1.

While the supply of water for a mining project in Namibia is one of the key risk areas, RUN has completed pump testing of aquifers close to the proposed mine site that has confirmed the availability of significant amounts of groundwater (albeit saline) at INCA and in the nearby palaeochannel system. Aquifer recharge tests and Government licensing will determine how much (if not all) of the total water supply required for the Omahola Project can be sourced from this natural, local water supply.



Consequently, provisions have been included in the initial project design and costing for an on-site desalination plant. RUN is also pursuing an alternative option of securing desalinated sea water to be supplied by Namibia's water services provider **NamWater**.

Importantly, due to the proximity of the proposed mine and processing plant to the coastal towns of **Swakopmund** and **Walvis Bay** (both approximately 40 kilometres), and access to the mine area via a sealed, black-top road (C28) it is anticipated there will be no need for on-site housing for construction and operation personnel.

### Capital and Operating Cost Estimates

SNCL has estimated **preliminary project capital costs** for the assumptions outlined above in the range of **US\$324 to US\$336 million**, including mining pre-stripping and the construction of a tailings storage facility. Capital costs for utility infrastructure (water and power) to the mine gate have not been included; however, operating costs include electricity costs with an allowance for funded electrical infrastructure. Water is assumed to be supplied on-site as desalinated ground water and the cost for a reverse osmosis unit has been included.

SNCL has estimated **operating costs** should range from **US\$24.90 to US\$25.30 per pound U3O**8 including the cost of iron recovery.

Capital costs include a 10% contingency and both capital and operating costs are reported with an accuracy of -15% to +25%.

#### Inclusion of Ongolo Alaskite Project and Extension of PFS

On 29 April 2010, DYL announced the discovery of alaskite-hosted uranium mineralisation located approximately 12 kilometres northeast of the INCA deposit. Subsequently, DYL announced additional drilling results that highlighted an interpreted mineralised zone of 2 kilometres strike length, up to 300 metres wide and ranging from roughly 60-200 metre depth, and with grades ranging from 400 to 500 ppm U<sub>3</sub>O<sub>8</sub>. The project was renamed the Ongolo Alaskite Project (Figure 1). On 13 December 2010, DYL announced that due to a change in analytical procedure, the grade of previously reported mineralised intervals for Ongolo increased by approximately 30% from a weighted average grade of 453 ppm to 587 ppm U<sub>3</sub>O<sub>8</sub>.

In addition, the style of uranium mineralisation at Ongolo is the same as that in ore mined and processed at the Rossing Uranium Mine for the past 30+ years, and is therefore well understood from the standpoint of metallurgy, processing and costs. It is also similar to mineralisation at Extract Resource's Husab uranium project and Bannerman's Etango project located just north of INCA. Uraninite is the only primary uranium mineral identified in mineralogical studies to-date and is therefore similar to the INCA deposit and is expected to be compatible with the process proposed for the Omahola Project.

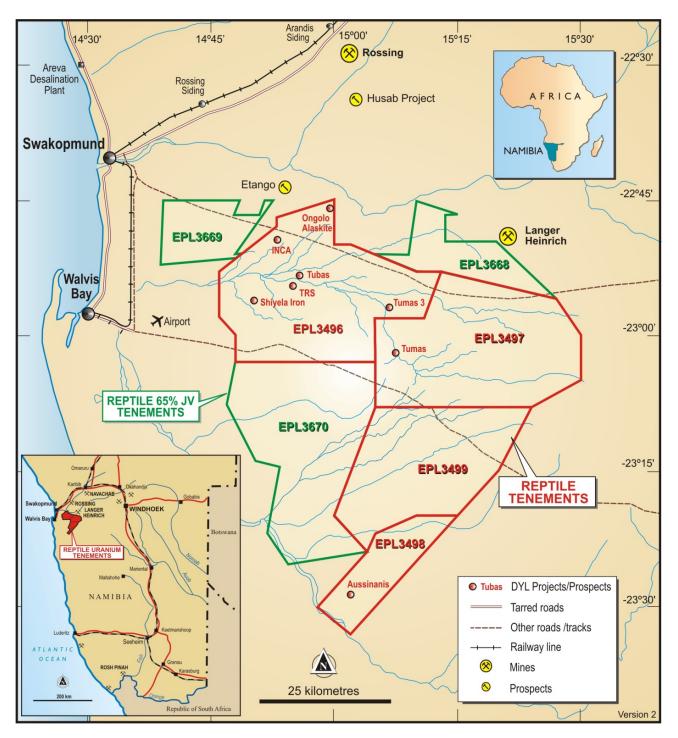
As a result of the fact that the exciting discovery at Ongolo is close to INCA; has the potential to add significant high-grade uranium resources; is similar to well-understood ore being processed at Rossing; and, is expected to be compatible with the proposed acid leach process for the Omahola Project, DYL has decided to extend the timeframe for the completion of the PFS to the second quarter of 2011 in order to incorporate the Ongolo mineralisation into the PFS as a source of ore for the Omahola Project.

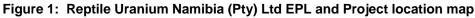
# DYL is confident that the inclusion of Ongolo Alaskite material has the potential to positively impact the overall PFS results for the Omahola Project.

Detailed reverse circulation (RC) and diamond drilling within the interpreted two kilometre strike length at Ongolo is ongoing for resource delineation and an initial Mineral Resource estimate is anticipated by the end of March 2011.

# POSITIVE INTERIM PFS RESULTS FOR OMAHOLA PROJECT IN NAMIBIA







## **Omahola Project Uranium Resources**

The Omahola Project currently includes the INCA and TRS uranium deposits. INCA contains Indicated and Inferred Mineral Resources totalling 14.9 million tonnes at 405 ppm eU<sub>3</sub>O<sub>8</sub> for 6,077 tonnes (13.4 Mlbs) U<sub>3</sub>O<sub>8</sub> (ASX 29 October 2010). The TRS deposit contains Measured, Indicated and Inferred Resources totalling 13.9 million tonnes at 160 ppm eU<sub>3</sub>O<sub>8</sub> for 2,217 tonnes (4.9 Mlbs) U<sub>3</sub>O<sub>8</sub> (ASX 22 April 2010). Therefore, the Omahola Project has total resources containing 8,294 tonnes (18.3 Mlbs) U<sub>3</sub>O<sub>8</sub> (Table 1).



Deposit – JORC Category	Cut-Off (ppm U3O8)	Tonnes (Million)	eU3O8 (ppm)	U3O8 (ppm)	U3O8 (tonnes)	U3O8 (Million Pounds)
INCA - Inferred	250	5.5	445	0.044	2,449	5.4
INCA - Indicated	250	9.4	385	0.039	3,628	8.0
TRS - Inferred	100	10.7	158	0.016	1,685	3.7
TRS - Measured/Indicated	100	3.2	168	0.017	532	1.2
Omahola Project – Total		28.8	288	0.029	8,294	18.3

#### Table 1: Omahola Project Mineral Resource Estimate

Additional resources are anticipated from the INCA deposit with further infill drilling. In addition, ten new INCA-Type targets have been identified, with the first of these targets (IT-3) being drilled and resulting in a drillhole intercept of 11 metres at 1,064 ppm eU<sub>3</sub>O<sub>8</sub> from 84 metres depth (ASX 17 November 2010).

The TRS deposit contains lower grade material, but the material has been demonstrated to be amenable to beneficiation and is anticipated to be upgraded to 400+ ppm U<sub>3</sub>O<sub>8</sub> using a portable beneficiation plant located at the TRS deposit. Additional TRS material has been identified along the flanks of the 30+ kilometre long Tubas-Tumas palaeochannel and has the potential for significant additional resources with further drilling. RUN has purchased a beneficiation pilot plant to demonstrate TRS beneficiation. Operation of the pilot plant will commence during the 1<sup>st</sup> Quarter 2011 after commissioning by the German supplier Schauenburg.

In addition to INCA and TRS, it is anticipated the Ongolo Alaskite project will also provide feed material to the Omahola Project. As indicated above, Ongolo is currently being drilled extensively in anticipation of an initial JORC Mineral Resource estimate in March 2011 to boost the total resources for the Omahola Project.

## Environmental Studies

Environmental studies have also been progressing since November 2009 and continuing in parallel with the PFS. On 3 and 5 November 2010, RUN held open-forum public meetings and presentations in Windhoek and Swakopmund respectively on the findings of the environmental studies and overall Environmental Impact Assessment of the proposed Omahola Project. As part of the public information process, documents, providing more detail of the proposed project, including conceptual plant and process description, are available on DYL's website.

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Further information relating to the Company and its various exploration projects can be found on the Company's website at <u>www.deepyellow.com.au</u>.

# POSITIVE INTERIM PFS RESULTS FOR OMAHOLA PROJECT IN NAMIBIA



#### **Compliance Statement**

The information in this report that relates to the Mineral Resource estimation for the INCA deposit is based on work completed by Mr Neil Inwood who is a full-time employee of Coffey Mining and a Member of the Australasian Institute of Mining and Metallurgy. Mr Inwood has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Inwood consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the Mineral Resource estimation for the INCA deposit is based on information compiled by Mr Steve Le Brun, who is a full-time employee of Coffey Mining and a Member of The Australasian Institute of Mining and Metallurgy. Mr Le Brun has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking, to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Mineral Resources and Reserves'. Mr Le Brun consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the Mineral Resource for the Tubas Red Sand deposit is based on information compiled by Mr Mike Hall, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Hall is Consulting Geologist Resources with the MSA Group and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking, to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Mineral Resources and Reserves'. Information in this report has also been verified by Mr Mike Venter, who is a member of the South African Council for Natural and Scientific Professions (SACNASP), a "Recognised Overseas Professional Organization" ('ROPO'). Mr Venter is Regional Consulting Geologist, with The MSA Group and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking, to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Mineral Resources and Reserves'. Mr Venter has visited the project sites to review drilling, sampling and other aspects of the work relevant to this announcement.

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Dr Leon Pretorius a Fellow of The Australasian Institute of Mining and Metallurgy. Dr Pretorius has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr Pretorius consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Where  $eU_3O_8$  is reported it relates to values attained from radiometrically logging boreholes with Auslog equipment using an A675 slimline gamma ray tool. All probes are calibrated either at the Pelindaba Calibration facility in South Africa or at the Adelaide Calibration facility in South Australia.

**Deep Yellow Limited** is an Australian-based uranium focused exploration company with extensive advanced operations in Namibia and in Australia.

In Namibia the Company's principal development focus is through its wholly-owned subsidiary **Reptile Uranium Namibia P/L** principally on the Omahola Project Pre-Feasibility Study involving the mid to high grade INCA primary uraniferous magnetite and secondary Red Sand projects and the extensive secondary calcrete deposits contained in the Tubas-Tumas palaeochannel and emerging Ongolo Alaskite project and the non-core Shiyela Magnetite Iron project.

In Australia the Company is focused on resource delineation of mid to high grade discoveries in the Mt Isa district - Queensland, including the Queens Gift, Conquest, Slance, Eldorado, Thanksgiving, Bambino and Turpentine Prospects. A pipeline of projects in both countries is continually being examined and there is extensive exploration potential for new, additional uranium discoveries in both Namibia and Australia.

## POSITIVE INTERIM PFS RESULTS FOR OMAHOLA PROJECT IN NAMIBIA



Appendix 1: Omahola Conceptual Process Plant – Schematic View

