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Nuclear Buzz

## KAP's Latest And Greatest

*By Andrea Jennetta, Publisher*

So last week Kazatomprom issued a press release about several projects it is working on with Russia.

On Oct. 6 KAP said that Astana and Moscow signed an MOU that confirmed their commitment to previously reached agreements to cooperate on nuclear energy stuff and "agreed to focus on further partnership development using the existing infrastructure of joint ventures, including in uranium production, conversion, enrichment, fabrication of fuel…"

Here, there are two items of note for Uraniumland. First, KAP and Uranium One signed an agreement on "further development" of the Karatau JV. Karatau is the name of the plant that processes ore from the Budenovskoye deposit in South Kazakhstan province.

Naturally, despite KAP CEO Askar Zhumagaliyev's assurance at the WNA conference in September that Kazakhstan would not increase output, I wondered exactly what "further development" means. So I asked The Scott Melbye, who is a senior advisor to Zhumagaliyev, for insight.

"For Karatau, as with any ISR operation, you have to keep adding wellfields to maintain steady state production," Melbye told me. "The agreement re-commits the two companies to existing production plans. Production is not being increased." Indeed.

NEW PROJECTS

## Berkeley: Demand Expected to Grow 'Significantly' from 2018

*By Roger Murray, Global Correspondent*

Development of the $100 million Salamanca uranium project in west-central Spain began in August, owner Berkeley Resources (AIM:BKY) confirmed in an Oct. 11 news release.

Work has been initially limited to supporting infrastructure, but "material procurement has begun and main construction will start early next year."

The firm added that after a decade and $60 million of investment, infrastructure development is "well underway" (*FCW* #678, Sept. 29).

Berkeley highlighted that its investment will help rejuvenate a local community severely impacted by unemployment with over 450 new jobs and an estimated 2,700 indirect jobs, while injecting new business opportunities into local firms and suppliers, many of whom have been struggling due to long term under investment in the area.

It added: "With shipments commencing in 2018 the mine will supply customers in Europe, the U.S. and Asia, many of whom are expanding their nuclear reactor fleets to meet 2030 carbon targets with 65 new reactors currently under construction worldwide."

Berkeley remains bullish about the prospects for a stronger uranium market in two years' time.

"Demand for uranium is expected to grow significantly from 2018 as U.S. and EU utilities commence re-contracting for uranium supply and will be competing with China which is currently bringing on line seven new reactors a year and has just allocated a further $570 billion to construct an additional sixty reactors over the next decade."

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Managing director Paul Atherley commented: "As work on the ground progresses we move closer to our goal of being one of the world's lowest cost uranium producers, reliably supplying long term customers from the heart of the European Union."

Canada's Dundee Capital Markets (DCM) recommends the firm as a buy—not a speculative one as with most uranium project developers/explorers—with a £1.35 ($1.69) target price. Berkeley's AIM share price closed at £0.52 ($0.65) on Oct. 12, only slightly below its 12-week high of £0.54 ($0.68).

In an Oct. 11 update, analyst David Talbot said that while his firm views the infrastructure works start "as virtually a non-news item, these early steps coupled with ongoing exploration and Zona 7 deposit are likely taking minimal cash."

He noted that project financing would be the next key step, following the recent appointment of a front end engineering and design contractor and non-binding off-take letter of intent "suggest that management believes it approaches project financing."

Talbot added: "We like Salamanca's attractive economics, location, considerable upside potential, and management and technical teams that deliver on milestones. Weaker euro and additional Zona 7 high-grade may help improve economics further."

## Honeymoon Re-Start Decision by 2018

The results of a recently-completed expansion study for the currently-mothballed ISR Honeymoon mine in South Australia by Boss Resources (ASX:BOE) has provided sufficient confidence for it to proceed to the next phase. A decision to resume mining is expected by end-2017.

GR Engineering Services did the study with the Australian Nuclear Science and Technology Organization undertaking preliminary test work on selected resins and organics for the proposed ion exchange and solvent extraction circuits.

Key findings were a low capital outlay of $7 million for a plant restart and $57 million for a capacity expansion to 2 million pounds (907 tonnes) per year, plus steady state operating costs of $24 per pound.

A hybrid ELUEX process will be analyzed in detail in the next phase, a pre-feasibility study, which will also include exploration of the 2,595 square kilometers "highly-prospective tenement package."

Honeymoon comprises two main exploration areas, the Eastern and Western tenement regions that host the Honeymoon, East Kalkaroo, Brooks Dam and Gould's Dam deposits, one mining lease and five exploration licenses.

The study identified and detailed the opportunity to restart the existing plant with a capacity of 888,000 pounds (399 tonnes) per year for minimal cost.

The plant would be operated during expansion, generating early cash-flow and enabling a more effective ramp-up from the wellfields.

The June 2016 JORC compliant resource used for the study was 57.8 million pounds (26,218 tonnes) contained uranium, grading an average 654 ppm (0.07%).

Of the total, 6.5 million pounds (2,948 tonnes) is measured grading 1,720 ppm (1.7%), and 10.6 million pounds (4,808 tonnes) indicated grading 810 ppm (0.8%).

A number of assumptions were made, based on a projected production profile staged to ramp-up to a final output of 3.6 million pounds (1,633 tonnes):

- Ore for the first three years of production can all be obtained from M&I resources, falling to 80% in years four and five;
- For the Gould's Dam expansion all the material for the first four years can be sourced from M&I resources; and
- 50% of the required material for the first nine years can be obtained from these resources.

## Issues Behind Poor Operations in the Past

The expansion study reviewed the issues that had affected plant performance with the previous owners and included solutions in design criteria, process routes and cost estimates to solve these problems.

It found that the key issue during the previous operating period was the inability to maintain the required uranium tenor in the feed to the plant.

The design specification called for a feed tenor of 75 milligrams per liter (mg/l), while on a continuous basis an average tenor of