

30th January 2013

Company Announcements Office  
Australian Securities Exchange Limited  
4<sup>th</sup> Floor  
20 Bridge Street  
SYDNEY NSW 2000

Dear Sir/Madam

**Charley Creek Rare Earths Project**  
**Scoping Study making good progress**

The Scoping Study for a mining and processing operation at the Charley Creek Alluvial Rare Earth Project\* in Central Australia is proceeding well. This study is being overseen by Crossland's Chief Operating Officer Tony Chamberlain and will produce capital and operating cost estimates for all of the major facets of the Charley Creek project including mining operations, wet and dry plant mineral concentration facilities, REO refinery, infrastructure, accommodation, water supply, and draft environmental scoping documents (ESD).

The study assumes construction of a wet and dry mineral concentrator to produce a high grade (40%+) TREO concentrate followed by onsite refining to remove uranium, thorium and major gangue elements to yield a high purity mixed rare earth carbonate product.

Progress on specific elements of the study is as follows:

1. MSP Engineering was awarded the engineering scoping study in November 2012 and is on track to deliver their final study report at the end of February. This study will provide a capital and operating cost estimate for the production of a high grade monazite/xenotime concentrate and associated infrastructure. ALS Metallurgy (Ammtec) has completed sulphuric acid bake and caustic 'crack' test work on a high grade Monazite/Xenotime concentrate sample from the Charley Creek project. Initial results indicate both process routes are technically feasible. Further optimisation test work on the production of concentrate and the refinery will be undertaken in the first half of this year.
2. Process design for the REO refinery has been awarded to a specialist consultant. A process design package will be provided to MSP Engineering to generate a +/-35% capital and operating estimate for the construction and commissioning of the REO refinery. The study flowsheet will consist of the following process steps:

Sulphuric acid pug roast --> Water leach --> Iron/Thorium precipitation --> Uranium IX --  
> RECO<sub>3</sub> Mixed Carbonate precipitation --> RECO<sub>3</sub> drying and packaging.

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Capital and operating cost estimates for the REO refinery are expected to be available before the end of the first quarter of 2013, and this will be incorporated into the economic assessment for the Charley Creek Project.

3. GHD is progressing towards the draft EIS for the Charley Creek project. GHD is also undertaking hydrogeological studies across the Charley Creek project area to source sufficient underground water for mining and processing plants.

These studies will generate the necessary data to allow economic assessment of the Charley Creek project to be quantified. The Scoping Study and economic assessment of the project will be made available to shareholders on completion. Crossland expects that the Scoping Study and financial analysis will provide a compelling business case and that the project will then proceed quickly to further resource drilling of starter pit areas, and a Feasibility Study.



**Geoff Eupene**

Exploration Director FAusIMM (CP)

- \* *The Charley Creek Alluvial Rare Earth Project is owned by the Crossland Uranium Mines Ltd (55%)/Pancontinental Uranium Corp (45%) Joint Venture*

*The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by **Geoffrey S Eupene CP**, a Fellow of the Australasian Institute of Mining and Metallurgy. He is a director of the Company and a full time employee of Eupene Exploration Enterprises Pty Ltd. He has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration, and to the activity which he is undertaking to qualify as a Competent Person as defined in the December 2004 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Geoffrey S Eupene has consented to the inclusion in this report of the matters based on this information in the form and context in which it appears.*