



NORTHERN MINERALS

Powering Technology.



Quarterly Activities Report

DECEMBER 2016

The focus this quarter has been on pre-commitment works and contract tendering for the Browns Range pilot plant construction ahead of a final investment decision in early 2017.



Northern Minerals (ASX: NTU) is focussed on the delivery of the heavy rare earth element, dysprosium. NTU has a large landholding in WA and the NT that is highly prospective for this element.

Through the development of the Browns Range Project, NTU aims to be the first significant world producer of dysprosium outside of China. Dysprosium is an essential ingredient in powering clean energy technology applications such as hybrid cars and wind turbines. A key feature of the Project is its xenotime mineralisation which facilitates a relatively simple and cost effective processing flowsheet to produce a dysprosium rich mixed RE carbonate.

Corporate Overview

Highlights:

- ◆ Engineering, Procurement and Construction (EPC) contract executed with Sinosteel Equipment & Engineering Co., Ltd (Sinosteel MECC).
- ◆ WA Department of Mines & Petroleum approves Mining Proposal for Browns Range Pilot Project.
- ◆ Extension granted to Huatai Mining, with \$9 million paid during the December quarter and a further \$7.5 million received by the end of January 2017.
- ◆ 2,000m Reverse Circulation (RC) drilling program completed at Browns Range, including infill, groundwater monitoring and reconnaissance exploration holes.
- ◆ Tenement sale agreement concluded post quarter end with Northern Star Resources (ASX: NST) to sell exploration licences in the Tanami Region of the Northern Territory for \$1.25 million in cash.
- ◆ Mr Nan Yang, an experienced mining engineer, was appointed as a nominee of Huatai Mining to the Northern Minerals board.
- ◆ Debt free – following closure of R&D Loan facility with Innovative Funding during the December quarter and the closure of the Lind facility in January 2017

Browns Range Project Update

Northern Minerals continues to progress the staged development of its 100% owned, dysprosium-rich Browns Range heavy rare earth element project, located southeast of Halls Creek in the Tanami region of Western Australia.

The Company has the opportunity to become the first significant dysprosium producer outside of Australia through the development of the high grade Browns Range project, placing Northern Minerals in a unique position to capitalise on the growing demand for the rare earth element in the production of neodymium iron-boron magnets commonly used in the production of motors for electric vehicles and wind turbines.

During the December quarter, Northern Minerals executed the Equipment, Procurement and Construction (EPC) contract with Sinosteel Equipment & Engineering Co., Ltd (**Sinosteel MECC**). The contract provides for the processing plant to be constructed in China and then transported to Australia for installation.

Under the contract, Sinosteel MECC has agreed to defer payments representing 20% of the contract value for a period of 24 months. Alternatively, Sinosteel MECC has the right, at its election, within nine months of practical completion, to convert the deferred payment amount into Ordinary Northern Minerals' shares at a conversion price of the lower of 15 cents per share or the 20 day VWAP prior to election.

Sinosteel MECC has appointed Worley Parsons to undertake the design work for the pilot plant, with final costings expected during the March quarter.

During the quarter, the Company also provided an extension to Huatai Mining with respect to completing the \$30 million equity placement. Huatai Mining, an Australian entity, is a related body corporate of Taizhong Energy Australia Pty Ltd, which is the local investment arm of Chinese coal producer Shandong Taizhong Energy Co. Ltd. A further \$7.5 million was received during January 2017 on top of the \$9 million received during the December quarter.

Recent policy changes by the State Administration of Foreign Exchange of China ("SAFE") restrict the ability of Chinese entities to effect foreign currency transactions. As a consequence of these changes and despite their best efforts, Huatai Mining was not able to complete the transfer of funds required to complete the Second Final Tranche and the Third Final Tranche ("Final Subscription Payment") by the required date.

Accordingly, Huatai Mining requested, and the Company agreed to grant a further extension to 28 January 2017 by which time Huatai Mining expects to be able to transfer funds. Post quarter end, the Company announced that funds had started to be received in smaller parcels with \$7.5 million received in January 2017.

Whilst important pre-commitment works for the development of the Pilot Plant operations at Browns Range have continued, including mine planning, drilling, water supply and engineering design, the Huatai Mining funding delay may have the potential to push the Final Investment Decision back towards the end of the March quarter.

The results from the December RC drilling program are expected in February 2017 and will be used to update the geological interpretations and resource estimates of the central, western and eastern Gambit deposits. The mine planning for the Pilot Plant will then be finalised during the March quarter.

The bore pumps for the water supply have been ordered and are scheduled to be installed along with the 14km pipeline during the March quarter.

Post the quarter end, the Company purchased second hand camp units on auction to expand the existing exploration camp from 20 rooms to 48 rooms, with installation of the camp extension scheduled during the March quarter.

Following execution of the EPC contract, Sinosteel MECC immediately commenced the basic engineering design for the pilot plant. Members from the Northern Mineral project team attended engineering design workshops in Beijing in late December and members of the Sinosteel and Worley Parsons team visited Perth in January 2017 to further advance basic engineering design which together with final EPC costing is expected to be complete toward the end of the March quarter.

EPC CONTRACT EXECUTION

In November, Northern Minerals selected Sinosteel MECC as the preferred EPC contractor for the Browns Range Project. Sinosteel MECC has extensive global experience in the delivery of projects of this nature.

On December 19, the Company announced that it had executed the EPC contract with Sinosteel MECC in Beijing. Under the contract, Sinosteel MECC has agreed to defer payments representing 20% of the contract value for a period of 24 months. Alternatively, Sinosteel MECC has the right, at its election, within nine months of practical completion, to convert the deferred payment amount into Ordinary Northern Minerals' shares at a conversion price of the lower of 15 cents per share or the 20 day VWAP prior to election.

Following execution of the EPC contract, Sinosteel appointed Worley Parsons to undertake the detailed design for the pilot plant. This work is well underway with final costings expected during the March quarter.



Northern Minerals Managing Director, George Bauk and Sinosteel MECC Director, Wang Jian, sign the Memorandum of Understanding in Beijing

PROJECT FUNDING

The subscription agreement with Huatai Mining, announced on 2 August, provided staged funding tranches to Northern Minerals subject to the satisfaction of a number of conditions precedent, including shareholder approval and clearance through the Foreign Investment Review Board process.

Initial payments of \$3 million were received during August. The first of three tranches of \$9 million was received at the end of October 2016. The second and third tranches were expected to be received before the end of December.

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Accordingly, Huatai Mining requested, and the Company agreed to grant a further extension to 28 January 2017 by which time Huatai Mining expects to be able to transfer funds. Post quarter end, the Company announced that funds had started to be received in smaller parcels with \$7.5 million received in January 2017. As at 31 January 2017, the company has received a total of \$19.5 million.

APPROVALS

Northern Minerals received approval during the quarter from the WA Department of Mines and Petroleum for its Mining Proposal, which is another key milestone in the overall approvals process towards the commencement of mining operations.

The Company also recently submitted a Works Approval and Licence with Western Australian Department of Environment Regulation (DER). There is a 60-day approval period, with notification expected in February 2017.

Post the conclusion of the reporting period, Northern Minerals received Foreign Investment Review Board approval for the equity investment by Huatai Mining .

DRILLING

Northern Minerals completed a 2,000 metre RC drilling program at Browns Range during the December quarter.

The RC drilling campaign had three main focuses:

- 1) Infill drilling within the central, western and eastern Gambit first stage open pits.
- 2) Eight groundwater monitoring bores, which will be used for environmental monitoring during the Pilot Plant phase, and
- 3) First-pass drill testing of a high priority exploration target at Banshee South.

The results of the infill and Banshee South drilling are expected in early February.

Corporate

DIRECTOR APPOINTMENT

As part of the investment agreement, Huatai Mining is entitled to nominate two directors to the Board of Northern Minerals, with Mr Nan Yang being the first representative appointed as a Non-Executive Director during the quarter following receipt of the first \$9 million tranche.

Mr Yang is an Australian mining engineer with more than 10 years' experience in mine planning, design, and mergers and acquisitions.

Mr Yang completed a Bachelor of Mechanical Engineering at the Yan Tai University in China before completing a Postgraduate Diploma in Mining and Master of Science in Mining at the Western Australian School of Mines.

R&D REBATE RECEIVED

At the end of October, the Company received A\$1.76 million research and development rebate from the Australian Government and the company closed out its R&D Loan facility with Innovative Funding. The rebate was for work completed to progress the Browns Range Pilot Plant Project during the 2015/16 financial year.

NORTHERN STAR TRANSACTION

During the September quarter, Northern Minerals entered into a binding tenement sale agreement with Northern Star Resources to sell a package of non-core exploration licences in the Tanami region of the Northern Territory for consideration of \$1.25 million in cash.

The package included 12 granted exploration licences covering 3,350 square kilometres as well as an additional 3,360 square kilometres subject to exploration licence applications.

Northern Star will pay a further \$1.5 million in cash upon establishment of a 1 million ounce Inferred Mineral Resource on the tenements, while Northern Minerals will retain the rare earths rights on all of the ground.

The terms of the agreement also include Northern Star gaining gold exploration rights at Northern Minerals' Boulder Ridge project, while Northern Minerals will acquire the rights to rare earth elements in four exploration licences which Northern Star has agreed to acquire from Toro Energy Limited.

In January 2017, the transaction was completed with Northern Minerals receiving A\$1.25 million. A further \$250,000 bond with the Central Land Council is expected to be returned during the March quarter.

LIND FUNDING CONCLUDED

Post quarter end, the Company concluded the Lind Funding Facility entered into in 2015. The Company is grateful for the support shown by Lind Partners LLC over this period as it worked through restructuring Browns Range as a multi-stage project. Following the conclusion of the Lind Funding Facility, Northern Minerals is debt free.

PROMOTION AND MARKETING

During the December quarter, the Company undertook a number of marketing initiatives aimed at increasing the profile of the Company and the Browns Range Project. George Bauk, Northern Minerals' CEO/MD presented at the Low Emissions and Technology Minerals Conference in Perth. The Company also undertook a roadshow in Sydney and Melbourne, presenting to brokers and analysts.

In January, Mr Bauk attended a reception for the Japanese Prime Minister at Kiribilli House in Sydney.

March Quarter Activities

Northern Minerals is on track for a Final Investment Decision at the end of the March quarter followed by construction commencement, with the Company's strategy to construct the Pilot Plant at Browns Range during 2017.

The recent delay in the Huatai Mining payments is unlikely to have a material impact on the overall project development.

Key news flow expected during the March quarter includes:

- Final Investment Decision;
- Completion of basic engineering design and final EPC costing;
- Awarding of mining and Civil contracts;
- Appointment of key project personnel;
- Infill and Banshee South drilling results;
- Works Approval notification;
- Completion of Huatai Mining subscription, and
- Completion of offtake agreements.

- ENDS -

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About Browns Range

The Browns Range Project is internationally considered a best in class, shovel ready deposit with well understood mineralogy. Northern Minerals plans to develop the Browns Range Project in three stages. Stage one will be the development of Pilot Plant operation; Stage Two the development of the project to bankable feasibility study level; and Stage Three the building of the project to full scale production.

The proposed pilot plant, at a scale of 10%, has a designed front end of 60,000 tonnes per annum crushing beneficiation circuit and a 3,200 tonnes per annum hydrometallurgical plant aimed at producing 590 tonnes per annum of TREO in a mixed rare earths carbonate, including 49 tonnes per annum of dysprosium.

The pilot plant is scheduled to operate for three years, in which time a decision to commit to the full scale operation will be taken, which if approved would take an additional two years to construct.

Three stage approach to full scale production



Project	Location	Tenement ID	State	Change of Status in Quarter	Status	Holder Application	Interest
	Browns Range	E80/4479	WA		Granted	Northern Minerals	100%
	Browns Range	E80/4725	WA		Granted	Northern Minerals	100%
	Browns Range	E80/4726	WA		Granted	Northern Minerals	100%
	Browns Range	E80/4806	WA		Granted	Northern Minerals	100%
	Browns Range	E80/4883	WA	Surrendered		Northern Minerals	100%
	Browns Range	E80/4782	WA		Granted	Northern Minerals	100%
	Browns Range	M80/627	WA		Granted	Northern Minerals	100%
	Browns Range	L80/76	WA		Granted	Northern Minerals	100%
	Browns Range	L80/77	WA		Granted	Northern Minerals	100%
	Browns Range	L80/78	WA		Granted	Northern Minerals	100%
	Browns Range	L80/79	WA		Granted	Northern Minerals	100%
Browns Range NT	Browns Range	EL24193	NT		Granted	Northern Minerals	100%
	Browns Range	EL24174	NT		Granted	Northern Minerals	100%
	Browns Range	EL24941	NT		Application	Northern Minerals	100%
	Browns Range	EL26270	NT		Granted	Toro Energy Limited	Acquiring REE rights
	Browns Range	EL26286	NT		Granted	Toro Energy Limited	Acquiring REE rights
John Galt	John Galt	E80/4298	WA		Granted	Northern Minerals	100%
	John Galt	E80/4671	WA		Granted	Northern Minerals	100%
	John Galt	E80/4779	WA		Granted	Northern Minerals	100%
	John Galt	E80/4967	WA		Granted	Northern Minerals	100%
Boulder Ridge	Boulder Ridge	EL24177	NT		Granted	Northern Minerals	100%
	Boulder Ridge	EL25171	NT		Granted	Northern Minerals	100%
	Boulder Ridge	EL29594	NT		Granted	Northern Minerals	100%
	Boulder Ridge	EL24849	NT		Application	Northern Minerals	100%
	Boulder Ridge	EL24935	NT		Application	Northern Minerals	100%

QUARTERLY ACTIVITIES REPORT

December 2016



	Boulder Ridge	EL28868	NT		Application	Northern Minerals	100%
	Boulder Ridge	EL30132	NT		Application	Northern Minerals	100%
	Boulder Ridge	EL27590	NT		Granted	Toro Energy Limited	Acquiring REE rights
Gardiner-Tanami NT	Tanami	EL23932	NT		Granted	Northern Minerals	100%
	Tanami	EL25009	NT		Granted	Northern Minerals	100%
	Ware Range	EL26498	NT		Granted	Northern Minerals	100%
	Ware Range	EL26541	NT		Granted	Northern Minerals	100%
	Pargee	EL27367	NT		Granted	Northern Minerals	100%
	Tanami	EL29592	NT		Granted	Northern Minerals	100%
	Tanami	EL29593	NT		Granted	Northern Minerals	100%
	Tanami	EL29595	NT		Granted	Northern Minerals	100%
	Tanami	EL23933	NT		Application	Northern Minerals	100%
	Ware Range	EL24179	NT		Application	Northern Minerals	100%
	Ware Range	EL24947	NT		Application	Northern Minerals	100%
	Ware Range	EL25003	NT		Application	Northern Minerals	100%
	Ware Range	EL25004	NT		Application	Northern Minerals	100%
	Tanami	EL25172	NT		Application	Northern Minerals	100%
	Tanami	EL29619	NT		Application	Northern Minerals	100%
	Tanami	EL29621	NT		Application	Northern Minerals	100%
	Tanami	EL26635	NT		Granted	Toro Energy Limited	Acquiring REE rights
Rabbit Flats	Rabbit Flats 1	EL25157	NT		Application	Northern Minerals	100%
	Rabbit Flats 2	EL25158	NT		Application	Northern Minerals	100%
	Rabbit Flats 3	EL25159	NT		Application	Northern Minerals	100%
	Rabbit Flats 4	EL25160	NT		Application	Northern Minerals	100%
	Rabbit Flats 5	EL23935	NT		Application	Northern Minerals	100%
Kurundi	Kurundi	EL29616	NT		Granted	Horn Resources	100% REE rights only



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George Bauk
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Colin McCavana
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Adrian Griffin
Non-executive Director
Yanchung Wang
Non-executive Director
Nan Yang
Non-executive Director

Bin Cai
Alternate Director

Management

Robin Wilson
Exploration Manager
Robin Jones
Project Manager
Mark Tory
Chief Financial Officer/
Company Secretary

About Northern Minerals

Northern Minerals Limited (ASX: NTU) is a heavy rare earth (HRE) company focussed on the production of dysprosium and yttrium, elements which are in short supply globally.

With a relatively simple and low cost processing flowsheet, Northern Minerals can produce a high grade mixed rare earth oxide product which is highly sought after in international markets to power clean energy and high end technology applications.

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