



## ASX RELEASE

For Immediate Release – 20 October 2016

### Nuurstei Coking Coal Project Development Update

- Preliminary pit optimisation modelling using both Indicated and Inferred Resources and using a range of coking coal prices indicates that a large proportion of resources could report to an open pit.
- Pit optimisation work combined with stronger coking coal pricing provides encouragement to complete additional further commercial and feasibility studies.
- Planning to complete additional drilling to convert deposit tonnes from the Inferred to Indicated categories and to test deposit extensions being undertaken by independent geologists MBGS.
- Process underway to convert exploration license 13580X to a Mining License.
- Aspire has an option expiring in March 2017 to increase its beneficial ownership in the Nuurstei project from 45% to 90% for US\$1m and a royalty.

Mongolian coal explorer Aspire Mining Limited (ASX: AKM, the **Company** or **Aspire**) is pleased to announce that its 50% owned Ekhgoviin Chuluu Joint Venture (**ECJV**) with the Noble Group (SGX: N21) has recently completed preliminary pit optimisation work based on the current geological model that indicates a large proportion of the current deposit could report to an economic open pit.

The Company released (refer to ASX announcement 13 April 2016) a Resource Statement that reported 4.75 Mt in Indicated Resources and 8.1 Mt of Inferred Resources in accordance to the JORC Code 2012 at the Nuurstei Coking Coal Project ("**Nuurstei**"). This was based on a report received from McElroy Bryan Geological Services Pty Ltd ("**MBGS**"), incorporating results of work completed in the 2014 and 2015 exploration drilling programs at Nuurstei.

The ECJV currently has a 90% interest in Nuurstei and Aspire has an option to purchase Noble's 50% interest in the ECJV exercisable through to March 2017.

Nuurstei is located in northern Mongolia and is 10 kilometres south from the Khuvsgul airmag capital of Moron. It also lies in close proximity to a sealed road connecting to the east to the Erdenet connection to the Trans Mongolian Railway. Nuurstei is also well placed to be an early user of the proposed Northern Railway Project which extends rail from Erdenet to Aspire's Ovoot Coking Coal Project and then further northwest to the Russian city of Kyzyl.

Nuurstei is viewed as a low capital cost starter project which could assist with the development of the much larger Ovoot Coking Coal Project which is 160 kilometres further to the west and assist with developing logistical capabilities and market development for coking coals from northern Mongolia.



**Figure 1: Nuurstei project proximity to existing rail infrastructure and Moron, capital of the Khuvsgul province in Mongolia's north**

MBGS are currently developing a plan for additional drilling to both sample additional seams identified in the deposit definition process in order to increase the proportion of Indicated Resources and potentially add to the overall deposit base.

## Scoping Study

The ECJV have agreed to commence a scoping study for the Nuurstei Coking Coal Project.

An international mining contractor with a presence in Mongolia will assist in providing mining costs for a proposed mining schedule.

A logistics provider will provide transport cost estimates along with rail tariffs for delivery onto the Chinese rail system.

Float sink testwork has commenced to assist with preliminary flowsheet design and operating and capital cost estimates.

The Mining License application process is continuing with environmental surveys being undertaken to support a Definitive Environmental Impact Assessment.

It is proposed that the scoping study based on the current deposit will commence before the end of 2016, although due to weather limitations, any further drilling to potentially increase Indicated Resources will not be able to commence until April/May 2017 consistent with the Mongolian spring. Only after the results of the additional drilling are included in an updated geological model will the results of the scoping study be able to be finalised.

### Coal Quality Observations

Coal sampling and analysis undertaken in late 2015 was of a preliminary nature consistent with the early stage of development of Nuurstei. However, washed coal quality results clearly indicate the widespread presence of a good hard coking coal with excellent plastic properties.

Indicative Washed Coal Quality (Air Dried)	
Moisture %	0.5
Ash %	9.2
Volatile Matter %	26
Total Sulphur %	0.7
Phosphorus %	0.09
Free Swelling Index (FSI)	8.5
Caking Index ("G")	98
Gieseler Fluidity (ddm)	3755
Max Dilatation %	190
Sapozhnikov Index - X mm	16
Sapozhnikov Index - Y mm	29
Base/Acid ratio	0.14
Vitrinite %	90
RoMax	1.35

**Table 3: Indicative Washed Coal Quality (air dried basis)**

A composite sample taken in 2014 provided material for an indicative 7kg Coking Coal Test at the ALS laboratory in Brisbane, Queensland. This sample produced a strong hard coke with a CSR of 67 and a yield of 78%. Based on these carbonisation results, Nuurstei coking coal would be considered in the top category of hard coking coals.

The average clean coal results indicate the coal has a potential to realise a blend component of premium hard coking coal. The coal has high reactive content with consequent excellent plastic properties such as FSI, fluidity and dilatation. The coal also has moderately high base elements in ash which act adversely on coke strength.

A coal such as this would ideally be blended with other materials which have high inerts low base element in ash content and moderately low phosphorus. Such a blend would be expected to realise a premium grade coke with high coke strength.

Further quality work would need to consider drop shatter and wet tumble of large diameter core samples to provide better accuracy on yield and product ash assessment. An evaluation is required to determine the qualities of intermediary plies within the seams of interest that were not analysed in this program as this will impact on overall product yield and to some extent on product quality.

## Future Development Scenario

Nuurstei could comprise a shallow multi-seam open pit mining operation with a low strip ratio, particularly in the eastern part of license 13580X. Further drilling work and sample analysis will be needed to improve coal resource categorisation and to complete mine planning. Other coal projects in the area will also be assessed for consolidation.

The ECJV has resolved to apply for a Mining License over the Nuurstei Coking Coal Project which will give the ECJV tenure over the property for 30 years. As part of this work, a hydrogeology assessment and a preliminary economic analysis will be undertaken.

Aspire's Managing Director, David Paull, noted that "while tonnages falling into the JORC resource categories are modest, the Nuurstei project presents as a commercial scale pilot project for logistics and market development for Ovoot and other coking coals from northern Mongolia before rail access is established. It could also provide commercial scale rail freight cargo's onto the Northern Rail Line to iron out logistical teething problems before the much larger volumes from the Ovoot Coking Coal Project need to be dealt with."



Figure 3: Aspire coal and rail infrastructure project locations

## ABOUT ASPIRE MINING LIMITED

Aspire Mining Limited is listed on the ASX (ASX: AKM) and is the largest coal tenement holder in Mongolia's Northern provinces and is focused on identifying, exploring and developing quality coking coal assets. Aspire currently owns a 50% interest in and is the operator of the Ekhgoviin Chuluu Joint Venture (ECJV), and has an option to increase its ownership to 100% of the ECJV. The ECJV owns a 90% interest in the Nuurstei Coking Coal Project (Nuurstei), and following a successful 2014 exploration program conducted additional exploration work through 2015 with the aim of identifying JORC 2012 coal resources. Nuurstei could commence production as a road based operation and access the new Erdenet to Ovoot railway as early as two years from the commencement of rail construction.

Aspire is also the owner of the world class Ovoot Coking Coal Project (Ovoot) which is the second largest coking coal project by reserves in Mongolia. The Ovoot project development is dependent on the construction of the Erdenet to Ovoot railway which is being progressed by Northern Railways LLC (Northern Railways). Northern Railways has been granted a rail concession in August 2015 and is progressing the negotiations and completion of a bankable feasibility study, funding, EPC contract, applications for licences, permits and approvals to commence railway construction.

Production from the Ovoot project can coincide with the commissioning of the Erdenet to Ovoot railway.

### About Ekhgoviin Chuluu Joint Venture

The Ekhgoviin Chuluu Joint Venture (ECJV) is currently a 50/50 joint venture arrangement between Aspire and Singapore listed Noble Group (SGX: N21, Noble). Aspire is the operator of the ECJV and has an option to purchase Noble's 50% interest, exercisable by March 2017. The ECJV owns a 90% interest in its flagship Nuurstei Coking Coal Project (Nuurstei) located in northern Mongolia and a 100% interest in the Erdenebulag Coal Project located in the South Gobi region of Mongolia.

The ECJV is assessing Nuurstei's development potential and has commenced the process to apply for a Mining License over the deposit. Nuurstei's close proximity to existing infrastructure (town, road, rail and services) provides an excellent opportunity to assess the economics of a road-based operation, prior to the completion of the Erdenet to Ovoot railway construction. Access to a paved road from Moron to Erdenet is now available and Aspire owns land at Erdenet that could be used as a coal stockpile and train load-out area.

#### **Competent Persons Statement – Nuurstei Coking Coal Project**

The information in this report that relates to Reporting of Exploration Results and Coal Resources at Nuurstei Project, is based on information compiled under the supervision of, and reviewed by, the Competent Person, Mr Parbury, who is a full time employee of McElroy Bryan Geological Services, is a Member of the Australasian Institute of Mining and Metallurgy (101430) and who has no conflict of interest with Aspire Mining Limited.

The reporting of Coal Resources for 13580X presented in this report has been carried out in accordance with the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves', The JORC Code 2012 Edition prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC).

Mr Parbury has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 JORC Code. Mr Parbury consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

**For more information contact:**

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