

Unit 8, 8 Clive Street West Perth, WA 6005 GPO Box 2811 - Perth WA 6001 Telephone : +61 (0)8 9324 3200 Facsimile : +61 (0)8 9324 3111 Email : info@bciron.com.au ABN : 21 120 646 924 ACN : 120 646 924 ASX : BCI Website : www.bciron.com.au

# BC IRON BOARD APPROVES DEVELOPMENT OF NULLAGINE IRON ORE PROJECT

## <u>HIGHLIGHTS</u>

- Feasibility Study confirms technical and economic viability of the Nullagine Iron Ore Project in the Pilbara
- Estimated capital expenditure for mine development of approximately A\$43 with a forecast operating cost of A\$43/tonne over the life of mine
- Mine life of over 8 years with potential to be extended through mine camp and regional exploration, and joint venture opportunities
- Maiden Ore Reserve of 36Mt at 56.9% waste to ore ratio 1:1
- Pisolite fines product to be exported via Fortescue Metals Group rail and port infrastructure
- Off-take agreement signed with Australian company Tennant Metals Pty Ltd
- First ore production targeted for Q2 2010
- Production at 3Mtpa targeted for Q4 2010 increasing subsequently to 5Mtpa
- Feasibility Study delivered to FMG for review

Australian iron ore Company BC Iron Limited (ASX: BCI; "BCI") is pleased to announce the successful completion of the Feasibility Study on the Company's **Nullagine Iron Ore Project**, located in the Pilbara Region of Western Australia.

The Study has confirmed that the Nullagine Project is an economically and technically robust direct shipping ore (DSO) project, which will produce at an initial rate of 1.5 million tonnes per annum (Mtpa) then ramp up to 3Mtpa then 5Mtpa as roads and infrastructure are upgraded.

Following a review of the Feasibility Study, BC Iron's Board has made the formal decision to move forward with development of the Nullagine Project, paving the way for the Company's transition to

03 July 2009

production, subject to acceptance of the Study by FMG and appropriate project finance being secured. Based on these final set of requirements, first production is targeted for the second quarter of 2010.

BCI's Managing Director, Mr Mike Young, said the formal decision to develop and mine at Nullagine represented an outstanding achievement for the Company, coming less than three years after BC Iron listed on the ASX.

"In a very short space of time we have defined a premium high-quality iron ore resource, completed a Scoping Study, secured an off-take agreement, formalised an infrastructure agreement with FMG and now completed a Feasibility Study – amounting to a great set of achievements in anyone's language," said Mr Young.

"The development of the Nullagine Project will also bring significant new investment, employment and opportunities to the region, benefiting all stakeholders."

#### FEASIBILITY STUDY

BC Iron's Feasibility Study was carried out to a 'definitive' standard and is based on a 1.5Mtpa start-up and 3Mtpa ramp-up development schedule. The Nullagine Project hosts a Direct Shipping Ore (DSO) resource of 50.7 Mt at 57% Fe (Appendix 2). The study focussed only on the Channel Iron Deposit (CID) mineralisation at the Outcamp, Warrigal and Coongan Deposits (Table 1); the Bonnie East Deposit was not included in the Feasibility.

Resource Class	Mt	Fe	CaFe	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	S	Р	LOI <sub>1000</sub>
Measured	1.7	57.0	64.8	3.49	2.15	0.016	0.018	12.0
Indicated	38.6	57.0	64.7	3.15	2.09	0.011	0.016	12.0
Inferred	2.1	57.0	64.6	3.41	2.02	0.012	0.023	11.8
TOTAL	42.4	57.0	64.7	3.18	2.09	0.011	0.016	12.0

# Table 1 - Resource Estimate used in Feasibility Study Outcamp – Warrigal – Coongan Deposits

#### Ore Reserves

An important outcome from the Study is the Probable Ore Reserves generated as a result of the feasibility work. The reserve of 35.6Mt at 56.9% Fe (Table 2) is based on the Mineral Resource estimate (April 2009) for these three deposits provided in Table 1.

The Ore Reserves were estimated by Coffey Mining Pty Ltd whose Ore Reserve Declaration is attached (Appendix 1). The ore reserves are based on estimates of mineral resources carried out by Golder Associates and reported to the ASX by BC Iron on April 2, 2009 (Table 2).

The deposits contain low contaminant levels, and occur at or near surface resulting in an overall waste to ore ratio of 1.1.

Area	Probable Ore								
	Mt	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	Р%	S%	LOI	All Mbcm	W:O
OUTCAMP WELL	19.2	56.8	1.9	3.2	0.01	0.01	12.2	12.8	0.9
COONGAN WELL	6.0	57.0	1.8	2.5	0.01	0.01	12.4	7.2	2.3
WARRIGAL WELL	10.3	57.0	2.1	3.7	0.02	0.01	11.7	6.3	0.7
TOTAL	35.6	56.9	2.0	3.2	0.02	0.01	12.1	26.4	1.1

#### Table 2 – Ore Reserve Estimate – Nullagine Iron Ore Project

Mbcm – million bank cubic metres

W:O – waste to ore ratio

The pit designs also contain 2.3 Mt of inferred resources at 56.8% Fe which was treated as waste during mine planning.

#### **Project Management and Study Components**

The Study was project managed by BC Iron and involved the input of a variety of experienced subconsultants including:

Component	Consultant
Resource Estimation	Golder Associates
Ore Reserve estimation	Coffey Partners Pty Ltd
Mine Design and Scheduling	BC Iron
Environmental Permitting	Strategen
Metallurgical Test Work	Vulcantech, Ammtec, Vermeer
Sintering Test Work	Shandong University, PRC
Processing	BC Iron & Terex Jacques
Iron Ore Marketing	Tennant Metals, Vulcantech
Engineering Design	Engenium
Hydrological Assessment and Modelling	WorleyParsons & MWH
Contract and Tender Management	BC Iron & Middletons Lawyers
Geotechnical Studies	Golder Associates
Mining Methods	Tenderers, Vermeer, Engenium
Haulage	Tenderers
Traffic Management Studies	Tenderers
Waste Rock Characterisation	BC Iron
Flora	Astron
Terrestrial Fauna	Bennelongia & Bamford Consulting
Subterranean Fauna	Bennelongia

#### FINANCIAL

Capital and operating costs for the Study were based on tender submissions for all facets of the operation including infrastructure, mining, crushing and screening, and road haulage to FMG's railhead. Costs for rail haulage and port services are based on the Heads of Agreement (HOA) with FMG dated June 5, 2009.

The results of the Study indicate that the Project will be exceptionally robust, with forecast average operating costs over the life of mine of **A\$43 a tonne** Free on Board (FOB). The operating costs include mining, crushing and screening, truck haulage, rail haulage and ship loading.

Capital development costs for the initial 1.5Mtpa operation are estimated to be **A\$43 million**, with payback of capital expected to take less than two years from the start of production. The capital development cost for the expansion to 3Mtpa is forecast to be A\$17m and is expected to be funded from operational cash flow.

#### DEVELOPMENT SCHEDULE

Subject to achieving statutory environmental, heritage and mining approvals, the Company will commence the shipping of iron ore from Port Hedland in the first half of 2010. BC Iron is targeting exports of 1.5 million tonnes during the first 6 months of operations and will ramp up production to 3Mtpa upon the commissioning of a heavy haulage road to the nearby railhead at FMG Chichester operations.

The Company has set a longer-term production target of 5Mtpa that is conditional upon the completion of the planned FMG rail extension to Christmas Creek and increased port capacity at Port Hedland.

#### FMG JOINT VENTURE AND INFRASTRUCTURE SOLUTION

BC Iron and Fortescue Metals Group (FMG) recently signed an agreement that will, upon acceptance of the Feasibility Study by FMG, see them establish a joint venture to develop the Nullagine Joint Venture (NJV).

Following the BC Iron Board's endorsement, the Study will now be reviewed by FMG and if endorsed by them, the joint venture will be established. For a full description of the agreement, see BC Iron's release to the ASX dated June 5, 2009.

Once established, the Nullagine Joint Venture will use FMG's subsidiary, The Pilbara Infrastructure Pty Ltd (TPI), to provide rail haulage, port handling and ship loading facilities. The costs of these services are incorporated in the operating costs detailed above, and are under firm contract.

Output is expected to rise to a minimum of 3 million tonnes per annum (Mtpa) once the dedicated heavy haul road between the Nullagine mine site and the Chichester Operations is built and commissioned. When TPI's rail is extended to Christmas Creek and port capacity is increased, Nullagine's production could be increased to 5 Mtpa.

The NJV will benefit from synergies arising from the proximity to FMG's operations, including access to existing infrastructure, systems and facilities such as the David Forrest airstrip, which will expedite the logistics of the new mine development. Cost benefits derived from this relationship have not been accounted for in the Study and therefore provide a potential cost saving to the project.

Water requirements are relatively low and will be used mainly for dust suppression and BC Iron is considering a sealed all-weather haul road to reduce water use and maintenance costs. Power will be provided through on site portable generators.

#### **OPERATIONS**

The company and its contractors anticipate employing up to 40 people during the construction phase and up to 115 people during normal 1.5Mtpa operations. Once the project ramps up to 3Mtpa, the Company will employ up to 144 people, and at 5Mtpa will employ 182 people.

It is the intention of BC Iron to provide opportunities wherever possible to the local and Aboriginal community in the area. BC Iron will work closely with the Palyku and Nyiyaparli People, and the town of Nullagine to provide these opportunities.

#### MARKETING

When compared with Pilbara pisolite (CID) fines (Table 4), Nullagine ore falls within the spectrum of direct shipping fines iron ore grades. Low Phosphorus, moderate Alumina and excellent sintering qualities has led BC Iron to consider that the market will accept Hamersley Fines Yandi (HIY) benchmark pricing for its product.

Material	% Fe	% Al <sub>2</sub> O <sub>3</sub>	% SiO <sub>2</sub>	% P	% S	% LOI
Pisolite Fines (CID)	57 – 59	1.3 – 2.7	5.0 – 5.6	0.040	0.01 - 0.02	8.6 - 9.8
Nullagine Fines	57	2.0	3.2	0.02	0.01	12.1

#### Table 4. Comparison of Pilbara pisolite fines DSO and Nullagine ore

Value-in-use (VIU) modelling indicates that the value of Nullagine ore is at a premium (103%) to the HIY reference price; low contaminant chemistry and sinter results contribute most to the VIU. Nullagine ore will be placed into the market as a "high quality, sinter blend" product leveraging off the high VIU during commercial negotiations.

All tonnage produced during the start up stage will be supplied to the mainland Chinese market to develop the base load capacity for the project. After ramp up to 3Mtpa, China will be the main customer with secondary customers targeted in Taiwan, Japan and Korea. Taiwan will take tonnage on a long-term basis and is known to place a high value on low phosphorous ore.

Following expansion to 5Mtpa, China will continue to take the base load, with more end-users taking tonnage and spreading the risk profile in China. Furthermore, and as part of the ongoing customer base development, Korea and Japan will be considered as potential customers at this stage.

#### Off take agreement

BC Iron has entered into an agreement with Tennant Metals Pty Ltd (Tennant) for up to 50% of the offtake as either Principal or an Agency Open Book Basis. Tennant will provide pre-trade finance where required and is assisting with the arrangement of project finance linked to offtake.

It is the intention of BC Iron that Tennant takes 100% of the iron ore produced from the Project during the initial 1.5Mtpa stage to mitigate commissioning risk, reduce market confusion, and ensure optimum

price realisation. Marketing during the ramp up stages will be managed by Tennant for Chinese markets, and by Tennant and/or BC Iron for other country markets.

Offtake is secure and full commercial outcomes have been achieved for Stage 1 via the Tennant Metals – BC Iron offtake agreement.

#### PERMITTING

BC Iron is negotiating a Mining Agreement with the Palyku Native Title Claim Group covering the Nullagine Iron Ore Project and associated infrastructure for the 1.5Mtpa operation. The agreement follows almost close consultation with the Palyku during which a strong long-term relationship has been established between the parties.

Key state mining approval applications have been and will be submitted to relevant government departments with a view to achieving full project permitting by the first calendar quarter of 2010.

#### TEST PIT

BC Iron intends on extracting a 120,000kt bulk sample from the east end of the Outcamp deposit during the September Quarter. The object of the test is to:

- Assess the performance of the continuous miners;
- Test grade control techniques and reconciliation;
- Collect geological information; and
- Provide an 80,000 t bulk sample for export for marketing purposes.

#### EXPLORATION

The company will carry out mining studies on several smaller CID proximal to the mine site that were not included in the Feasibility Study. This includes the Bonnie East deposit which comprises an inferred resource of 8Mt at 57% Fe and 0.016% P.

Regional exploration, joint ventures, and acquisitions will also be considered to assess and exploit other CIDs which occur in the East Pilbara region.

- ENDS -

RELEASED BY: NICHOLAS READ READ CORPORATE TELEPHONE: +618 9388 1474 ON BEHALF OF: MR MIKE YOUNG MANAGING DIRECTOR BC IRON LIMITED TELEPHONE: +618 9324 3200

#### **Qualifying Statement**

This release may include forward-looking statements. These forward-looking statements are based on BC Iron's expectations and beliefs concerning future events. Forward-looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of BC Iron Limited, which could cause actual results to differ materially from such statements. BC Iron Limited makes no undertaking to subsequently update or revise the forward-looking statements made in this release to reflect events or circumstances after the date of this release.

#### **JORC Competent Persons Statement**

The information relating to the terms "iron ore", "exploration target", "direct shipping ore" and "upgrade" should not be misunderstood or misconstrued as an estimate of Mineral Resources and Reserves as defined by the JORC Code (2004) and therefore the terms have not been used in this context. It is uncertain if further exploration or feasibility study will result in the determination of a Mineral Resource or Mining Reserve.

The information that relates to the drilling data and geological interpretations is based on information compiled by Michael Young who is a Member of The Australian Institute of Geoscientists and a Director of the Company. The information that relates to the Mineral Resource Estimate at Outcamp, Warrigal Well, and Coongan Well has been compiled by Mr Richard Gaze who is a member of the Australasian Institute of Mining and Metallurgy and an employee of Golder Associates. Both Mr Young and Mr Gaze have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that they are undertaking to qualify as a Competent Persons as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Gaze and Mr Young consent to the inclusion in their names in the matters based on their information in the form and context in which it appears.

The information that relates to the Mineral Resource Estimate at Bonnie East has been compiled by Mr Greg Hudson who is a member of the Australasian Institute of Mining and Metallurgy and an employee of BMGS, and Mr Mike Young who is a member of the Australian Institute of Geologist and employees BC Iron. Both Mr Young and Mr Hudson have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that they are undertaking to qualify as a Competent Persons as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Hudson and Mr Young consent to the inclusion in their names in the matters based on their information in the form and context in which it appears.

The information that relates to the Ore Reserve has been compiled by Mr Blair Duncan who is an employee of the Company and a member of the Australasian Institute of Mining and Metallurgy, and Mr Pieter Doelman who is a member of the Australasian Institute of Mining and Metallurgy, and Mr Pieter Doelman who is a member of the Australasian Institute of Mining and Metallurgy and an employee of Coffey Mining Pty Ltd. Both Mr Duncan and Mr Doelman have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that they are undertaking to qualify as a Competent Persons as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Duncan and Mr Doelman consent to the inclusion in their names in the matters based on their information in the form and context in which it appears.

#### **APPENDIX 1**

## ORE RESERVES DECLARATION, COFFEY MINING PTY LTD

The Ore Reserves for the Nullagine Iron Ore Project were estimated by Coffey Mining personnel based on data provided by BC Iron. The Ore Reserve estimate is based upon the Mineral Resource estimate prepared by Golder Associates in May 2009.

Cut-off grades were calculated over the Measured and Indicated portion of the Mineral Resource in order to produce an ore product at 57% Fe and 2.0%  $AI_2O_3$ . Cut-off grade to produce this product is >55% Fe for the Domain 1 material (Mineralised CID) within the pit design.

Diluting material has been added to the in-pit Mineral Resources at an equivalent grade to that part of the Channel Iron Deposit – Domain 1 within the pit design but with a block grade less than 55% Fe.

With the current status of the Project, it is considered that there is sufficient certainty with the Modifying Factors to classify the Ore Reserves as Probable Reserves. There is not sufficient confidence to declare the in-pit Measured Mineral Resources as Proved Reserves for the following reasons

- 1. All mining leases and government approvals are not yet granted, although there are reasonable expectations of them being granted;
- 2. No mining has yet taken place, hence there is no historical basis for ore recovery and dilution estimates from reconciliations;
- 3. End use customers have not yet formally accepted the product and hence agreed on the ore price; and
- 4. The effectiveness of surface mining technology has not been proven in the Pilbara.

The Project includes multiple pits. Ore Reserves by pit are shown in the Table below.

The total Probable Ore Reserves at the Nullagine Project total 36Mt at 56.9%Fe and 2.0%  $Al_2O_3$ . No Proved Ore Reserves are declared.

The Ore Reserves are contained within designed and scheduled open pit outlines which are based on economic analysis of Measured and Indicated Resources. The Inferred Resources which occur within the pit outlines were treated as waste in the production schedule and project economic evaluation. The cash flow evaluation used to confirm the economic viability of the project and hence the Ore Reserves used metal prices and exchange rates provided by a well known Australian financial institution. Using the capital and operating costs developed in the Feasibility Study, sensitivity analysis suggest that the project retains a positive NPV and an IRR in excess of 10% at a received product price as low as A\$49/t.

This Ore Reserve estimate has been classified and reported in accordance with the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' of 2004 ("the Code") as prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Mineral Council of Australia ("JORC").

The Competent Person responsible for the mining aspects of the Ore Reserves is Mr Pieter Doelman who is a full time employee of Coffey Mining Pty Ltd and a member of the AusIMM. He has not visited the Project site.

#### APPENDIX 1 – Ore Reserves

	Nullagine Iron Ore Project Ore Reserves by Pit										
Area	Probable Ore								TM,	W:O	
	Mt	Fe%	Al <sub>2</sub> O <sub>3</sub> %	SiO₂%	<b>P%</b>	S%	LOI%	Mbcm	Mbcm	W:0	
Outcamp 1	6.6	57.1	2.1	3.5	0.02	0.01	11.9	0.6	2.9	0.3	
Outcamp 2	8.9	56.5	1.7	3.2	0.01	0.01	12.3	3.1	6.2	1.0	
Outcamp 3	2.2	56.9	1.8	2.3	0.01	0.01	12.5	1.2	2	1.6	
Outcamp 4	0.7	56.6	2.1	3.1	0.01	0.01	12.3	0.3	0.6	1.3	
Outcamp 5	0.8	56.3	2.6	3.5	0.01	0.01	12.3	0.8	1.1	2.7	
OUTCAMP WELL	19.2	56.8	1.9	3.2	0.01	0.01	12.2	6.1	12.8	0.9	
Coongan 1	3.3	57.1	1.8	2.5	0.01	0.01	12.2	3.8	5	3.2	
Coongan 2	2.7	56.8	1.9	2.6	0.01	0.01	12.5	1.2	2.2	1.2	
COONGAN WELL	6.0	57.0	1.8	2.5	0.01	0.01	12.4	5.0	7.2	2.3	
Warrigal 1	2.4	56.5	2.2	3.8	0.03	0.01	11.9	1.6	2.4	1.9	
Warrigal 2	0.4	56.4	2.4	3.7	0.02	0.02	11.9	0.2	0.3	1.1	
Warrigal 3	7.0	57.3	2.1	3.6	0.02	0.01	11.6	0.7	3.1	0.3	
Warrigal 4	0.5	56.2	2.2	3.6	0.02	0.01	11.7	0.2	0.4	1.2	
WARRIGAL WELL	10.3	57.0	2.1	3.7	0.02	0.01	11.7	2.6	6.3	0.7	
TOTAL	35.6	56.9	2.0	3.2	0.02	0.01	12.1	13.7	26.4	1.1	

#### **APPENDIX 2**

#### Mineral Resource Estimates – April 2009

#### Nullagine Iron Ore Project

DSO Resource Estimate										
	Mt	Fe%	CaFe%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P%	<b>S%</b>	LOI%		
Measured	1.7	57.0	64.8	3.49	2.15	0.018	0.016	12.0		
Indicated	38.6	57.0	64.7	3.15	2.09	0.016	0.011	12.0		
Inferred	10.4	57.0	64.8	3.27	2.00	0.013	0.010	12.1		
TOTAL DSO	50.7	57.0	64.8	3.19	2.07	0.015	0.011	12.0		
		С	ID Resour	ce Estima	ate					
	Mt	Fe%	CaFe%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	<b>P%</b>	<b>S%</b>	LOI%		
Measured	2.2	54.5	62.1	4.94	3.65	0.018	0.017	12.1		
Indicated	68.8	54.0	61.8	4.48	3.08	0.017	0.011	12.7		
Inferred	18.1	54.7	62.3	4.27	2.85	0.013	0.018	12.1		
TOTAL CID	89.1	54.1	61.9	4.45	3.05	0.016	0.013	12.6		

LOI at 1000°C

Calcined Fe (CaFe) = ( Fe% / (100 - LOI%)) \* 100

The Direct Shipping Ore (DSO) Resource is a subset of the Channel Iron Deposit (CID) resource