ASX ANNOUNCEMENT

25 May 2011



Commencement of Definitive Feasibility Study

Flinders Mines Limited (ASX: FMS) is pleased to announce that the Company will progress to a Definitive Feasibility Study (DFS) for its cornerstone Pilbara Iron Ore Project in Western Australia.

The DFS – to be undertaken by WorleyParsons – is scheduled for completion in Q2 2012 which maintains the current project timeline of first production from the Pilbara operation during 2014.

The focus of the DFS will be a proposed annual production rate of 15 Mtpa from start-up which is the higher of two options found to be economic by a Prefeasibility Study (PFS) completed in January this year by WorleyParsons. Value improvement studies which commenced after the PFS identified significant project value would be added by starting the project at the higher production rate.

Flinders Mines' Chairman, Mr Bob Kennedy, said the proposed long life mine, the Company's analysis of its economics, and global market demand and supply conditions for iron ore, have underpinned the decision to commence a DFS based on an immediate start-up at 15 Mtpa. This demonstrates a high degree of confidence in Flinders Mines being able to realise an infrastructure solution and deliver long term value to shareholders.

"The prefeasibility study endorsed an initial Stage 1 mine of 5 Mtpa at a capital cost of A\$488 million or the option to move immediately to a Stage 2 start-up mining operation delivering 15 Mtpa at an additional cost of A\$640 million," Mr Kennedy said.

"We have opted for the latter as the Board of Flinders Mines and the strong management team driving this project are extremely confident of the potential to sustain production of high quality ore over a long mine life. Such a commitment would not be made if we did not have a high level of confidence in being able to realise the Project's value," he said.

"The decision also further defines the project framework around which we are continuing ongoing negotiations with providers of infrastructure solutions and offtake agreements for the Pilbara Iron Ore Project."

Flinders Mines' Managing Director, Mr Gary Sutherland, said that subject to ongoing project milestones being met, the Company is on track to commence detailed design work during the third guarter of calendar year 2012 with first production anticipated in 2014.

The focus for production is the Pilbara Project's Blacksmith tenement, one of two of the Company's close-proximity tenements in WA's West Pilbara province.

Blacksmith contains the cornerstone Delta deposit targeted for first mining. The tenement is located between Rio Tinto's Caliwingina North iron ore resource, Fortescue Metals' Solomon iron ore hub, API's West Pilbara Iron Ore Project to the West, and to the South, Rio's Brockman 2 & 4 iron operations.

"The robust economic case identified during the prefeasibility study and the addition of significant value during the value improvement studies have provided the impetus behind the Board decision and announcement today," Mr Sutherland said.

"We are pleased that we are able to continue our association with WorleyParsons with this project as they have had successful involvement in a number of iron ore projects in the Pilbara region of Western Australia."

"It is a partnership that will continue to drive the transition of Flinders Mines from an explorer and project developer to a substantial producer of iron ore in the Pilbara," he said.

The Pilbara Iron Ore Project, 175 kilometres south of Dampier, contains a current global Indicated and Inferred Resource of 748 million tonnes (Mt) at an average grade of 55.4% Fe.

On behalf of the Board of Directors of Flinders Mines Limited

GARY SUTHERLAND

MANAGING DIRECTOR

25 May 2011

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