

Ivanhoe approves early works for Platreef Shaft 2

Robert Friedland, Executive Chairman of TSX-listed Ivanhoe Mines, and Lars-Eric Johansson, Chief Executive Officer, have announced that the company has approved the start of early-works construction for Shaft 2, which will be the main production shaft at the Platreef platinum group metals, nickel, copper and gold mine now being developed near Mokopane.

Ivanplats, Ivanhoe Mines' 64 %-owned subsidiary, is expected to begin the two-part, early-works programme for Shaft 2 in Q2 2017. The programme will consist of: excavation of a surface boxcut to a depth of approximately 29 m below surface; and construction of the concrete hitch (foundation) for the 103-m-tall concrete headgear (headframe) that will house the shaft's permanent hoisting facilities and support the shaft collar.

The early-works construction is expected to take approximately 12 months and cost in the region of R70 million.

Shaft 2 will be located approximately 100 m north-east of Shaft 1, where permanent sinking has been underway for eight months. With an internal diameter of 10 m, it will be lined with concrete and sunk to a planned final depth of more than 1 100 m below surface. It will be equipped with two 40-t rock-hoisting skips capable of hoisting a total of 6 Mt/a of ore – which will be the single largest hoisting capacity at any mine in Africa. The headgear for the permanent hoisting facility was designed by South Africa-based Murray & Roberts Cementation.

"This is another key milestone in the building of a new, state-of-the-art underground mine in South Africa," said Friedland. "Shaft 2 is the key to unlocking

Platreef's full potential and we believe that the time is right to prudently move forward with the development of this world-scale project."

Shaft 1, with an internal diameter of 7,25 m and also concrete lined, is in its main sinking phase and has reached a depth of approximately 305 m below surface. Sinking rates in Q1 2017 have been between 45 and 50 m per month.

Shaft 1 is expected to reach its projected final depth of 980 m below surface in 2018. It will be used for underground development of the Flatreef deposit and ultimately will become the primary ventilation intake shaft during the project's 4 Mt/a initial production case. Shaft stations to provide access to horizontal mine workings for personnel, materials and services will be developed at depths of 750, 850 and 950 m below surface.

The selected Flatreef mining areas occur at depths ranging from approximately 700 to 1 200 m below the surface. The planned mining of the Flatreef deposit will incorporate low-cost, mechanised mining methods, including long-hole stoping and drift-and-fill mining. Mined-out areas are to be backfilled with a mixture of tailings from the processing plant and cement. The



Sinking platform in operation at Shaft 1 (photo: Ivanhoe).

ore will be hauled from the mining stopes to a series of ore passes that will connect to a main haulage level leading to a primary rock crusher near Shaft 2, from where it will be hoisted to the surface for processing.

The definitive feasibility study for Platreef's first-phase production scenario is expected to be completed and released in Q2 2017. The study, which began in August 2015, is being prepared by principal consultant DRA Global. Specialised sub-consultants include Stantec Consulting, Murray & Roberts Cementation, SRK Consulting, Golder Associates and Digby Wells Environmental. ■

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