

May 7, 2018

# Ivanhoe Mines secures long-term supply of treated bulk water for the Platreef platinum, palladium, nickel, copper and gold mine in South Africa

# Recycling of local, treated water is part of a sustainable approach to minimize Platreef's environmental footprint

MOKOPANE, SOUTH AFRICA — Robert Friedland, Executive Chairman of Ivanhoe Mines (TSX: IVN; OTCQX: IVPAF), and Lars-Eric Johansson, Chief Executive Officer, announced today that a new agreement will provide local, treated water to supply most of the bulk water needed for the first phase of production at the Platreef platinum-group metals, nickel, copper and gold mine now being constructed in South Africa.

Ivanhoe's 64%-owned subsidiary, Ivanplats, signed a memorandum of agreement on May 3, 2018, with the Mogalakwena Local Municipality for the supply of a minimum of five million litres of treated water a day for 32 years, beginning in 2022, from the town of Mokopane's new Masodi Treatment Works.

Ivanplats expects to begin receiving a small quantity of processed wastewater this year after the Masodi plant has been commissioned. Further treatment will be conducted at the Platreef Mine's on-site filtration plant to ensure compliance with Ivanplats' quality standards. The initial supply will be used in Platreef's ongoing underground mine development, including drilling, and surface infrastructure construction.

Mr. Friedland said the agreement is an important milestone in Platreef's development.

"Our ability to re-use this assured supply of extensively upgraded wastewater that can be produced by the modern Masodi plant from flows it receives from local households and offices is a cost-effective and sustainable approach. Similar, industrial-quality water has long been used in some mining operations.

"Masodi will provide most of the water we need to process our ore and, at the same time, help to minimize Platreef's environmental footprint. Our commitment to effectively manage environmental impacts of our operations is central to Ivanhoe's undertaking to build some of the 'greenest' mines in the world."

Dr. Patricia Makhesha, Ivanplats' Managing Director, added: "We are on course to develop Platreef into South Africa's next great platinum-group metals mine, while ensuring that we do it in a way that is environmentally responsible and resource efficient. Our water-supply partnership with Mogalakwena is an important step toward our goal of achieving a balance of economic prosperity, environmental stewardship and social responsibility."

In July 2017, Ivanplats published its independent, definitive feasibility study for the first phase, four-million-tonne-per-annum (Mtpa) development of the Platreef Mine, approximately eight kilometres from Mokopane. Processing of ore at the mine is projected to begin in 2022.

Ivanplats estimates that it will require approximately 7.5 million litres/day (MI/day) of bulk water during the first-phase of steady-state production. A water-balance model developed for the mine calls for the bulk water for the first phase of production to consist of five MI/day from the Masodi treatment plant, with the balance provided from ground water from local, licenced boreholes, and rainwater collected in storage ponds at the mine.

Photo: Agreement signing attended by (from left) Ivanplats Managing Director Dr. Patricia Makhesha (standing); Ivanhoe Chief Financial Officer Marna Cloete (seated); Municipal Technical Director William Nkuna; Acting Municipal Manager Marcus Mthombeni; and Mogalakwena Mayor Andrina Matsemela.



Ivanplats to provide financial assistance to complete water treatment plant

Under terms of Ivanplats' agreement with Mogalakwena, which is subject to certain suspensive conditions, Ivanplats will provide financial assistance to the municipality for certified costs of up to a maximum of R248 million (approximately US\$19.6 million) to complete the Masodi Treatment Works. Ivanplats will purchase treated wastewater at a reduced rate of R5 per thousand litres for the first 10 MI/day to offset a portion of the initial capital contributed.

The Masodi plant and related infrastructure have been designed with a capacity of 10 Ml/day, with an option to be expanded by a further five Ml/day. Included in the agreed capital contribution is an unencumbered, upfront payment of up to R37million (approximately US\$2.9 million) to settle outstanding debts related to the construction of the Masodi Treatment Works that will entitle lvanplats to a right of first refusal for the purchase of all current and future treated wastewater from the plant. Ivanplats and the municipality will endeavour to collaborate on future water-supply and development projects, including other potential sources, to increase the volumes of available water to more than five Ml/day.

## **About the Platreef Project**

The Platreef Project is a tier-one discovery by Ivanhoe Mines' geologists on the Northern Limb of South Africa's Bushveld Igneous Complex, the world's premier platinum-producing region.

The project is owned by Ivanplats (Pty) Ltd, which is 64%-owned by Ivanhoe Mines. A 26% interest is held by Ivanplats' historically-disadvantaged, broad-based, black economic empowerment (B-BBEE) partners, which include 20 local host communities with a total of approximately 150,000 people, project employees and local entrepreneurs. In April 2018, Ivanplats reconfirmed its Level 3 status in its fourth verification assessment on a B-BBEE scorecard. A Japanese consortium of ITOCHU Corporation, Japan Oil, Gas and Metals National Corporation and Japan Gas Corporation, owns a 10% interest in Ivanplats, which it acquired in two tranches for a total investment of US\$290 million.

Ivanplats plans to develop the Platreef Mine as an underground mining operation in three phases: 1) an initial annual rate of four Mtpa to establish an operating platform to support future expansions; 2) a doubling of production to eight Mtpa; and 3) another expansion phase to a steady-state 12 Mtpa. At a projected production rate of 12 Mtpa, Platreef would be the largest platinum-group metals mine in the world, producing more than 1.2 million ounces of platinum-group metals per annum.

Sinking of Platreef's Shaft 1 reached a depth of 750 metres below surface on April 23, 2018. Development has begun of the second of four planned shaft stations – the 750-metre-level substation. Shaft 1 is expected to reach the top of the Flatreef Deposit, at a depth of approximately 783 metres, in the third quarter of this year. Sinking of the shaft will continue to a planned final depth of 980 metres.

Surface construction for Platreef's Shaft 2 is progressing. Blasting and excavation of a box cut to a depth of approximately 29 metres below surface is underway, and construction of a concrete hitch for the headframe is expected to be completed by the end of this year.

Ivanhoe has appointed five leading mine-financing institutions as Initial Mandated Lead Arrangers to arrange debt financing for the Platreef Mine's development. They are: KfW IPEX-Bank, a 100% subsidiary of the German promotional bank, KfW; Swedish Export Credit Corporation; Export Development Canada; Nedbank Limited (acting through its Corporate and Investment Banking division); and Societe Generale Corporate & Investment Banking. Expressions of interest have been received for approximately US\$900 million of the targeted US\$1 billion project financing.

### **Qualified person**

The scientific and technical information in this news release has been reviewed and approved by Stephen Torr, P.Geo., Ivanhoe Mines' Vice President, Project Geology and Evaluation, a Qualified Person under the terms of National Instrument 43-101 (NI 43-101). Mr. Torr has verified the technical data disclosed in this news release.

Additional scientific and technical information regarding the Platreef Project is contained in the Platreef 2017 Feasibility Study Technical Report dated September 4, 2017, filed on SEDAR at <u>www.sedar.com</u> and on the Ivanhoe Mines website at <u>www.ivanhoemines.com</u>.

### **About Ivanhoe Mines**

Ivanhoe Mines is advancing its three principal projects in Southern Africa: 1) Mine development at the Platreef platinum-palladium-nickel-copper-gold discovery on the Northern Limb of South Africa's Bushveld Complex; 2) mine development and exploration at the Kamoa-Kakula copper discovery on the Central African Copperbelt in the Democratic Republic of Congo (DRC); and 3) upgrading at the historic, high-grade Kipushi zinc-copper-lead-germanium mine, also on the DRC's Copperbelt. For details, visit <u>www.ivanhoemines.com</u>.

Media

### Information contacts

Investors Bill Trenaman +1.604.331.9834

North America: Bob Williamson +1.604.512.4856 South Africa: Jeremy Michaels +27.82.772.1122

Website <u>www.ivanhoemines.com</u>

#### FORWARD-LOOKING STATEMENTS

Certain statements in this news release constitute "forward-looking statements" or "forward-looking information" within the meaning of applicable securities laws, including without limitation, (i) statements regarding processing of ore at the Platreef Mine is projected to commence in 2022; (ii) statements regarding lyanplats estimates that the Platreef Mine will require approximately 7.5 million litres per day (MI/d) of bulk water during steady-state production; (iii) statements regarding lyanplats expects to begin receiving a small quantity of grey water from the Masodi water treatment plant in 2018; (iv) statements regarding Ivanplats will provide financial assistance to the municipality for certified costs of completing the Masodi water treatment plant, up to a maximum amount of R248 million; (v) statements regarding lyanplats and the municipality will endeavour to collaborate in relation to future water-supply and development projects to increase the treated-water volumes to more than five MI/day; (vi) statements regarding Ivanplats plans to develop the Platreef Mine as an underground mining operation in three phases: 1) an initial annual rate of four Mtpa to establish an operating platform to support future expansions; 2) a doubling of production to eight Mtpa; and 3) another expansion phase to a steady-state 12 Mtpa; (vii) statements regarding at a projected production rate of 12 Mtpa, Platreef would be the largest platinum-group metals mine in the world, producing more than 1.2 million ounces of platinum-group metals per annum; (viii) statements regarding the sinking of Shaft 1 will continue to a planned final depth of 980 metres; and (ix) statements regarding construction of a concrete hitch for the Shaft 2 headframe is expected to be completed by the end of this year.

Such statements involve known and unknown risks, uncertainties and other factors, which may cause actual results, performance or achievements of the project, the company, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements or information. Such statements can be identified by the use of words such as "may", "would", "could", "will", "intend", "expect", "believe", "plan", "anticipate", "estimate", "scheduled", "forecast", "predict" and other similar terminology, or state that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved. These statements reflect the company's current expectations regarding future events, performance and results and speak only as of the date of this release.

Readers are cautioned that actual results may vary from those presented.

All such forward-looking information and statements are based on certain assumptions and analyses made by lvanhoe Mines' management in light of their experience and perception of historical trends, current conditions and expected future developments, as well as other factors management believe are appropriate in the circumstances. These statements, however, are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking information or statements including, but not limited to, unexpected changes in laws, rules or regulations, or their enforcement by applicable authorities; the failure of parties to contracts to perform as agreed; social or labour unrest; changes in commodity prices; unexpected failure or inadequacy of infrastructure, industrial accidents or machinery failure (including of shaft sinking equipment), or delays in the development of infrastructure, the failure of exploration programs or other studies to deliver anticipated results or results that would justify and support continued studies, development or operations, and the failure to obtain financing necessary to advance and complete the development of the project. Other important factors that could cause actual results to differ from

these forward-looking statements also include those described under the heading "Risk Factors" in the company's most recently filed MD&A as well as in the most recent Annual Information Form filed by Ivanhoe Mines. Readers are cautioned not to place undue reliance on forward-looking information or statements. Certain of the factors and assumptions used to develop the forward-looking information and statements, and certain of the risks that could cause the actual results to differ materially are presented in the Platreef 2017 Feasibility Study Technical Report dated September 4, 2017, available on SEDAR at <u>www.sedar.com</u> and on the Ivanhoe Mines website at <u>www.ivanhoemines.com</u>.

Although the forward-looking statements contained in this news release are based upon what management of the company believes are reasonable assumptions, the company cannot assure investors that actual results will be consistent with these forward-looking statements. These forward-looking statements are made as of the date of this news release and are expressly qualified in their entirety by this cautionary statement. Subject to applicable securities laws, the company does not assume any obligation to update or revise the forward-looking statements contained herein to reflect events or circumstances occurring after the date of this news release.