

CERTIFICATE OF AUTHOR

This Certificate of Author has been prepared to meet the requirements of National Instrument 43-101 Standards of Disclosure for Minerals Projects as published 30 June 2011, Part 8.1.

a) Name, Address, Occupation:

Jon Treen
Stantec Consulting International LLC
1438 West Broadway Road, Suite 101, Tempe, Arizona 85282, USA
Mining Business Line Leader.

b) Title and Effective Date of Technical Report:

Kamoa-Kakula 2017 Development Plan with an effective date of 10 January 2018 (the "Technical Report").

c) Qualifications:

I graduated from Laurentian University in Sudbury Ontario with a Bachelor of Engineering in Mining Engineering in 1993. I am registered with the Professional Engineers of Ontario (PEO) as a P.Eng. (no. 90402637). I have practiced my profession continuously since 1993 and have experience in mining operations and consulting. I have operated mines up to the level of General Manager, looking after six underground operations in Ontario, Canada. These mines involved longhole stoping, drift-and-fill, post-pillar cut-and-fill, narrow-vein mining, and sublevel caving mining methods. I have been consulting since 2012, working on mines in various countries, including Canada, Chile, the Democratic Republic of the Congo, Indonesia, Mexico, South Africa, and the United States. As a result of my qualifications and experience, I am a Qualified Person as defined in National Instrument 43-101.

d) Site Inspection:

I visited the Kamoa project site from 31 October to 1 November 2013. During the visit, I inspected drill core, reviewed the drill core process, and inspected drills in operation on the site. Further inspection on the site of diamond drillhole collar locations, portal location, and tailings locations occurred. The visit included briefings from the Ivanhoe geological, site management, and project engineers. I also visited the KGHM operations in Poland to review the controlled convergence room-and-pillar mining method. The visit, from 26 to 28 January 2016, involved reviews of Lubin Mine and Runda Mine, and a review with their technology group, Cuprum.

e) Responsibilities:

I am responsible for Sections 1.12.1, 1.12.4, 1.14.3; Section 2; Section 3; Section 15; Section 16.2; Sections 21.2.1 to 21.2.2; Section 25.3; Section 26.3; and Section 27.

f) Independence:

I am independent of Ivanhoe Mines Ltd. in accordance with the application of Section 1.5 of National Instrument 43-101.

g) Prior Involvement:

I have worked on various aspects of the studies for the project since 2013.

h) Compliance with NI 43-101:

I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with same.

i) Disclosure:

As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated 12 January 2018.

/s/ Jon Treen

Jon Treen