

Form 51-102F3
Material Change Report

Item 1 Name and Address of Company

ZEN Graphene Solutions Ltd. (the “Company”)
210 – 1205 Amber Drive
Thunder Bay, ON P7B 6M4

Item 2 Date of Material Change

May 31, 2019

Item 3 News Release

The news release was disseminated on May 30, 2019.

Item 4 Summary of Material Change

Item 5 Full Description of Material Change

**ZEN Graphene Signs Agreement on Novel, Low Cost, High-Yield Graphene
Production Process**

Thunder Bay, ON – May 30, 2019, ZEN Graphene Solutions Ltd. (“ZEN” or the “Company”) (TSXV:ZEN) is pleased to announce that it has signed an initial agreement to in-license certain intellectual properties from a Canadian University that when combined with ZEN’s Albany Graphite, produces low cost, environmentally friendly graphene. The production process rapidly exfoliates Albany Graphite into few layer graphene (FLG, 2-5 layers) with a conversion efficiency of over 90%. Previous work has demonstrated that the unique Albany Graphite was converted to graphene far more efficiently when compared to flake or metamorphic graphite. This advantage was confirmed by recent testing using this new process.

“The challenge in the emerging graphene industry has been to produce consistent FLG, available in industrial quantities at prices that permit industrial adoption,” commented Dr. Francis Dubé. “We believe that with this exciting new process applied to our unique Albany Graphite product, ZEN Graphene Solutions possesses all the components to solve this challenge within a single vertically integrated company.

The company has collected 110 tonnes of graphite-mineralized material with an estimated average grade of 6% graphitic carbon during the 2019 bulk sample program (see [March 22, 2019 news release](#)). Once this material has been purified into approximately 99.8% graphite, this exfoliation process and others, will be used to convert the Albany Graphite into graphene and graphene oxide. The Company has commenced searching for an industrial location that will house a pilot production centre, a research and development lab as well as office space. The graphene produced by the pilot production centre will be offered for sale as permitted by the Ministry of Northern Development and Mines.

ZEN invites companies looking for bulk quantities of graphene as described earlier to contact Phil Chateigneau, Head of Sales at pchateigneau@ZENgraphene.com.

James Jordan, P.Eng., is the “Qualified Person” for the purposes of National Instrument 43-101 and has reviewed, prepared and supervised the preparation of the technical information contained in this news release.

About ZEN Graphene Solutions Ltd.

ZEN Graphene Solutions Ltd. is an emerging graphene technology company with a focus on development of the unique Albany Graphite Project. This precursor graphene material provides the company with a competitive advantage in the potential graphene market as independent labs in Japan, UK, Israel, USA and Canada have demonstrated that ZEN’s Albany Graphite easily converts (exfoliates) to graphene, using a variety of simple mechanical and chemical methods.

For further information:

Francis Dubé, Chief Executive Officer

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To find out more on ZEN Graphene Solutions Ltd., please visit our website at www.ZENGraphene.com. A copy of this news release and all material documents in respect of the Company may be obtained on ZEN’s SEDAR profile at www.sedar.ca.

Forward Looking Statements

This news release includes certain “forward-looking statements”, which often, but not always, can be identified by the use of words such as “potential”, “believes”, “anticipates”, “expects”, “estimates”, “may”, “could”, “would”, “will”, or “plan”. These statements are based on information currently available to ZEN and ZEN provides no assurance that actual results will meet management’s expectations. Although the Company believes that the expectations reflected in these forward-looking statements are reasonable, undue reliance should not be placed on them because the Company can give no assurance that they will prove to be correct. Since forward-looking statements address future events and conditions, by their very nature they involve inherent risks and uncertainties. Although ZEN believes that the assumptions and factors used in preparing the forward-looking information in this news release are reasonable, undue reliance should not be placed on such information, which only applies as of the date of this news release, and no assurance can be given that such events will occur in the disclosed time frames or at all. ZEN disclaims any intention or obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, other than as required by law. Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the

adequacy or accuracy of this release. The Company's full disclosure can be found at <https://zengraphene.com/disclaimer>

Item 6 Reliance on subsection 7.1(2) of National Instrument 51-102

Neither subsection 7.1(2) nor (3) of National Instrument 51-102 is being relied upon.

Item 7 Omitted Information

No information has been omitted on the basis that it is confidential information.

Item 8 Executive Officer

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DATED: May 31, 2019