

ZEN Graphene Solutions and Trebor RX Announce Successful Inhalation Safety Testing of ZENGuard(TM) - Enhanced Surgical Masks and Final Submission to Health Canada

June 4, 2021 (Source) – **ZEN Graphene Solutions Ltd.** (“**ZEN**” or the “**Company**”) (TSXV:ZEN)(OTC PINK:ZENYF), a Canadian, next-gen nanomaterials technology company and Trebor Rx Corp. (Trebor) are pleased to announce successful inhalation safety testing results of **ZENGuard**[™]-enhanced surgical masks and submission of these results to Health Canada. Testing was completed by NanoSafe Inc. (NanoSafe) in Blacksburg, Virginia confirmed that no **ZENGuard**[™] graphene material was released from the surgical masks with air flow rates simulating resting and light activity inhalation rates. The test results submitted to Health Canada are the final item from the information request ZEN received following the April 2 advisory. Health Canada is reviewing the application as a priority item with a decision expected shortly.

Greg Fenton, ZEN CEO commented: “With the final piece of safety information submitted to Health Canada, we believe our **ZENGuard**[™]-enhanced PPE is poised to become a commercial reality and bring an added level of protection to those that need it most. We remain fully aligned with Health Canada on the need to protect Canadians and value the opportunity to proactively differentiate our product from others in the market. ZEN is focused on developing and commercializing nanotechnologies that help protect people – and we expect our

highly-effective, Made-in-Canada solution to do just that.”

Inhalation Testing Details

Testing was completed by NanoSafe – a company based in the Virginia Tech Corporate Research Center focused on taking a disciplined and rational scientific approach to understanding environmental, health and safety risks related to nanotechnology.

- Testing was designed to evaluate particulate release to provide a maximum potential exposure of graphene-containing particles to mask wearers or bystanders in a typical use scenario
- Seven coated and uncoated masks were tested with three iterations each measuring the average particulate concentration over one minute
- Particulates released during testing were analyzed by scanning electron microscopy with energy-dispersive x-ray spectrometry
- On average, airborne particulate concentrations measured during testing of ZENGuard™ coated masks were observed to be lower than those of uncoated masks
- At a higher simulated inhalation rate, ZENGuard™ coated masks reduced the particulate concentration in comparison to the cleanroom background, providing further filtration of the cleanroom air
- No ZENGuard™ coating was detected in the limited amount of released particulate

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About ZEN Graphene Solutions Ltd.

ZEN is a next-gen nanomaterials technology company developing

graphene-based technologies that help protect people and the environment. ZEN is currently focused on commercializing ZENGuard™, a patent pending graphene-based coating with 99% antimicrobial activity, including against COVID-19, and the potential to use similar graphene compounds as pharmaceutical products against infectious diseases. The company has a significant R&D pipeline with an interest in monomers, polymers, metal alloys, corrosion coatings, biosensors along with the production of graphene oxide and graphene quantum dots. Additionally, the company owns the unique Albany Graphite Project which provides the company with a potential competitive advantage in the graphene market. Labs in Japan, UK, Israel, USA, and Canada have independently demonstrated that ZEN's Albany Pure™ Graphite is an ideal precursor material that easily converts (exfoliates) to graphene, using a variety of mechanical, chemical, and electrochemical methods.

About Trebor Rx Corp.

Trebor Rx Corp. is led by George Irwin and Brenda Elliott, the 3rd generation Canadian business icons behind the Irwin Toy brand, which has been operating in Canada for almost 100 years. Fueled by a dedicated and compassionate team prioritizing safety and innovation, Trebor is disrupting the PPE industry and setting a new standard of production for masks and face shields while solving problems of cost, comfort, and medical waste. A proudly Canadian company with a production facility located in Collingwood, Ontario, Trebor is committed to providing Healthcare, Frontline, and Essential workers with innovative, new patented technology PPE during COVID-19 and beyond.

To find out more about 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 contains forward-looking statements. 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.