



Zentek Announces Successful Phase 2 Results of HVAC Testing

Guelph, ON – December 15, 2022, Zentek Ltd. (“Zentek” or the “Company”) (Nasdaq: ZTEK; TSX-V: ZEN), an intellectual property development and commercialization company, reports, further to its [press release](#) of April 11, 2022, the successful completion of Phase 2 HVAC filter testing by the National Research Council of Canada (“NRC”).

The Company has received the preliminary report from Phase 2 testing under its Innovative Solutions Canada (“ISC”) Testing Stream contract. The report notes a significant reduction in live airborne test organisms with ZenGUARD™ coating applied to standard HVAC filters without modification to existing HVAC systems, with no reduction in air flow rates or increasing energy use. The testing demonstrated a reduction in live airborne bacteriophage surrogate contamination within a modular classroom environment, simulating a real-world environment. The testing was performed at the NRC’s unique bioaerosol testing facility designed and built specifically for testing wet aerosolized droplets, which is the primary mechanism for the spread of disease in an indoor setting.

“The significant increase in filtration efficiency of pathogen-laden water droplets without an impact to airflow rates creates a potentially powerful solution in the HVAC space,” said Greg Fenton, CEO of Zentek. “We are pleased that our patented ZenGUARD™ solution has shown to be effective and which could provide commercial opportunities to a wide array of indoor environmental stakeholders to improve air quality. From governments, schools, homeowners and hospitals to real estate management companies, landlords and tenants alike, all could utilize their existing equipment without additional capital investment, maintenance, or energy costs – enabling a simple and elegant solution. The result of providing cleaner air for indoor spaces is consistent with current global indoor air quality initiatives and environmental goals of reducing energy consumption.”

“The results of the National Research Council of Canada’s Phase 2 testing help validate our business model,” said Ryan Shacklock, VP of Strategy and Business Development at Zentek. “Along with our Health Canada-authorized ZenGUARD™-coated surgical masks, which demonstrated 99.99% Viral and Bacterial Filtration Efficacy, these HVAC test results bring us closer to the commercialization of our second ZenGUARD™-based product. ZenGUARD™ is becoming an antimicrobial technology platform from which we can potentially generate multiple other products that help improve air quality, health and safety.”

LMS Technologies

The Company has also been consulting and testing with LMS Technologies (LMS), a United States-based air media and filter testing company providing testing services and product certification for filter manufacturers. Their 3rd party independent testing of ZenGUARD™ coated MERV 8 filters demonstrated a significant increase in both bacterial and viral filtration efficiency in line with or better than the results from the NRC. This independent verification and optimization work with LMS will continue as Zentek moves towards commercialization of ZenGUARD™ in the HVAC market.

Next Steps Towards Commercialization

Zentek will continue:

1. To work to optimize configurations of HVAC filter materials coated with patented ZenGUARD™ technology at LMS to optimize our product offerings.
2. To complete all testing, and documentation required for regulatory submissions in Canada and the United States.
3. The Company has hired Intertek Group plc to conduct a review of regulatory requirements in other geographies of interest.

About Zentek Ltd.

Zentek is an IP development and commercialization company focused on the research, development and commercialization of novel products using graphene and nanomaterials for use in the healthcare industry and beyond.

Zentek's patented ZenGUARD™ coating is shown to have 99% antimicrobial activity, including against COVID-19, for use in PPE and potentially HVAC systems and other industries. Zentek's ZenGUARD™ production facility is located in Guelph, Ontario.

For further information:

Mitch Swergold

Tel: (917) 930-8723

Email: mswergold@zentek.com

To find out more about Zentek Ltd., please visit our website at www.Zentek.com. A copy of this news release and all material documents in respect of the Company may be obtained on Zentek's SEDAR profile at <http://www.sedar.com/>.

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 Zentek 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. Zentek 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.