Zentek Provides ZenGUARD(TM) Business Update

written by Raj Shah | April 25, 2024

April 25, 2024 (Source) – **Zentek Ltd.** ("**Zentek**" or the "**Company**") (Nasdaq:ZTEK)(TSX-V:ZEN), an intellectual property technology development and commercialization company is pleased to provide an update on its ZenGUARD™ platform. The Company has made significant strides preparing for the launch of ZenGUARD™ Enhanced Air Filters for the Heating, Ventilation and Air Conditioning ("HVAC") market and pursuing new opportunities for surgical masks.

ZenGUARD™ Enhanced Air Filters

Zentek's Business Development team led by Ryan Shacklock, Senior Vice President, Strategy and Business Development, has been executing an extensive education program for ZenGUARD™ Enhanced Air Filters. This includes attending HVAC industry events in both the United States and Canada where technical details and the latest developments of ZenGUARD™ Enhanced Air Filters are highlighted to potential customers, property managers and filter manufacturers and distributors.

The American Society of Heating and Air-Conditioning Engineers (ASHRAE)

Zentek representatives attended the 2024 ASHRAE Winter Conference in Chicago, Illinois in January 2024 to share technical details of ZenGUARD™'s impact on Minimum Efficiency Reporting Value ("MERV")-rated HVAC filters. Following this event, the team completed and submitted an extended abstract to ASHRAE titled: "ASHRAE Standard 241 and Graphene Silver-Coated MERV-A 9-A Filters: A Case Study." The abstract was coauthored

by Deepak Sridhar, Kathleen Owen, Ryan Shacklock, and Colin van der Kuur.

As context for this study, several organizations including the Centers for Disease Control and Prevention in the United States are advocating for improved indoor air quality via several strategies, including using higher MERV-rated HVAC filters. Similarly, ASHRAE introduced Standard 241, Control of Infectious Aerosols, which outlines specific recommendations for buildings of various types to reduce the risk of disease transmission. In certain instances, these recommendations have led to challenges stemming from:

Incompatibility of HVAC systems with higher MERV-rated filters

Higher filter and maintenance costs

Increased energy demand and emissions from conditioning additional outdoor air

Elevated energy demand and emissions from increased airflow restrictions associated with higher MERV-rated filters

This case study, which makes use of the approach outlined in the ASHRAE Standard 241, will be presented at the ASHRAE Annual Conference on June 23, 2024, in Indianapolis, Indiana.

The American Filtration and Separations Society (AFS)

AFS is an industry association recognized as a global leader in the filtration and separation industry. Each year AFS holds the FiltCon Conference, which is focused on driving education, knowledge exchange, and networking in the global filtration community. The Company attended this year’s event in Houston, Texas where it presented “Novel Silver-Graphene Oxide Composites: Enhanced MERV Filters for Controlling Infectious Aerosols.” Zentek has attended and presented at this event two

years in a row creating awareness with many technical and scientific participants in the HVAC industry.

BUILDEX

BUILDEX hosts Canada’s largest conferences and tradeshows for property management, interior design, architecture, construction, and renovation. Over the last number of months, the Company has attended and exhibited at BUILDEX events in Calgary, Alberta, Toronto, Ontario, and Vancouver, British Columbia. Through these events Zentek has had the opportunity to educate many decision makers about important technical aspects of ZenGUARD™ Enhanced Air Filters and made many valuable industry contacts.

PM SpringFest

PM Springfest is an event that connects property management professionals and building owners with innovations focused on improving health, safety, and energy management. Zentek will be exhibiting at this event in Toronto, Ontario on May 9, 2024, where it will look to share technical details and the latest developments of its ZenGUARD™ Enhanced Air Filters with key decision makers in the property management field.

ZenGUARD™ Surgical Masks

The Company continues to pursue securing sales in markets with stable demand for surgical masks. In the Canadian dental market, the Company is attending and exhibiting at national and provincial association events to create awareness with dentists, dental hygienists, orthodontists, and others who work in higher risk settings and regularly use surgical masks for protection. Similarly, the company has showcased ZenGUARD™ Surgical Masks at retirement community events to create awareness with employees who also work in higher risk environments and regularly use

surgical masks.

International Business Development

Zentek is in discussions in India with our local partners Arka BRENStech Pvt. Ltd. who have been focused on sourcing potential manufacturing and distributing partnerships for our ZenGUARD™ platform, both in the HVAC and surgical mask markets. The Company has also begun early discussions with potential partners in the United Kingdom and is exploring other attractive international markets with similar regulatory environments.

Regulatory

ZenGUARD™ Enhanced Air Filters are currently being assessed by the Health Canada Pest Management Regulatory Agency (PMRA) for registration under the *Pest Control Products Act*. Zentek will provide an update as soon as it is available.

Zentek is also currently working with consultants to file an application for ZenGUARD™ Enhanced Air Filters with the United States Environmental Protection Agency.

Additionally in April 2024, the Company filed a 510(k) application with the United States Food and Drug Administration (FDA) for ZenGUARD™ Surgical Masks. The Company was required to complete additional safety and performance testing for the application to the FDA. The Company has previously announced distribution partnerships for the United States market with Henry Schein and Medwell Solutions pending FDA clearance and will continue to explore other distribution channels.

Operations

Zentek previously reported that its production facility, including both the ZenGUARD™ production line and the coating line, have been fully commissioned and licensed including

certifications under the Occupational Health and Safety Act, Technical Standards and Safety Authority and its Environmental Compliance Approval. The Company has continued to work diligently in the following key areas:

Operational Readiness

Continuous improvement activities conducted across all manufacturing lines to achieve reliability and performance required to meet expected HVAC and surgical mask demand

Executing a robust preventative maintenance plan for efficiency and maintenance of production equipment

Quality management system improvements to deliver consistent quality on all current and future ZenGUARD™ products

Supply Chain

Improved inventory management, including the implementation of an inventory management system

Continue establishment and maintenance of key suppliers required to meet expected demand

Growth Planning

Completing scenario analysis to ensure future ZenGUARD™ production capability is safe, effective, and cost-conscious

Identification of required capital expenditures to meet demand growth

“Our top priority as a company is ensuring we do everything we can to capitalize as effectively as possible on our ZenGUARD™ opportunity,” said Greg Fenton, CEO of Zentek. “I’m proud of the tremendous work our team has done to get us to this point and look forward to achieving this all-important goal for our

stakeholders.”

The ZenGUARD™ Enhanced Air Filter product is currently being assessed for registration under the Pest Control Products Act.

It cannot be manufactured, imported, distributed, or used in Canada at this time, unless explicit authorization has been obtained from Health Canada to use this product for the purpose of conducting research under the Pest Control Products Regulations.

About Zentek Ltd.

Zentek is an ISO 13485:2016 certified intellectual property technology company focused on the research, development and commercialization of novel products seeking to give the company’s commercial partners a competitive advantage by making their products better, safer, and greener.

Zentek’s patented technology platform ZenGUARD™, is shown to significantly increase the bacterial and viral filtration efficiency for surgical masks and aims to do the same with HVAC (heating, ventilation, and air conditioning) filters Zentek’s ZenGUARD™ production facility is located in Guelph, Ontario.

Zentek, through its wholly owned subsidiary, Triera Biosciences Ltd., has a global exclusive licence to the aptamer-based platform technology developed by McMaster University, which is being jointly developed by Zentek and McMaster for both the diagnostic and therapeutic markets.

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To find out more about Zentek, 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.sedarplus.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 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.

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