

Albany Graphite Corp. Engages Micon International to Complete New PEA for Albany Graphite Project

New PEA to evaluate demonstrated high-purity thermal purification pathway and assess Albany's role in emerging North American critical mineral supply chains for nuclear energy, defence, and energy security applications

Guelph, Ontario--(Newsfile Corp. - April 9, 2026) - Zentek Ltd. (TSXV: ZEN) (NASDAQ: ZTEK) ("Zentek" or the "Company") is pleased to announce that its wholly-owned subsidiary Albany Graphite Corp. has engaged Micon International Limited ("Micon") to complete a new Preliminary Economic Assessment ("PEA") National Instrument 43-101 technical report for the Albany Graphite Project (the "Project"), located near Hearst, Ontario. Zentek expects the new PEA to be completed this summer.

High-Purity Pathway

A key differentiator that Micon will evaluate as part of its updated development case is Albany Graphite's tested bench-scale capability to produce 5N+ graphite (99.9992 wt.% Cg) directly from flotation concentrate (86% Cg) using an electrothermal fluidized bed reactor, without the use of chlorine. These results are intended to inform key process assumptions and product positioning to be assessed in the new PEA.

PEA Scope

Micon will prepare the new PEA as a scoping-level study supported by an updated Mineral Resource Estimate. The study will evaluate a development case that considers the thermal purification process and current market conditions.

Micon's work program will include:

- Updated Mineral Resource Estimate with revised cut-off grade analysis and current market pricing
- Conceptual mining method evaluation, pit design optimization, and high-level production scheduling
- Process flowsheet development and preliminary mass-balance assumptions, including evaluation of the thermal purification route
- Capital and operating cost estimates at PEA-level accuracy, supported by budgetary equipment quotes, infrastructure, logistics, and site-support concepts
- Tailings, water management, and environmental and social considerations at scoping level
- Economic and sensitivity analysis, and preparation of the NI 43-101 technical report for public disclosure

Mineral Resource Estimate

The most recently filed Mineral Resource Estimate for the Project (effective April 30, 2023) reports, using cut-off grades of 1.22% graphitic carbon (Cg) for open pit Mineral Resources and 1.76% Cg for underground Mineral Resources, Indicated Mineral Resources of 22.9 million tonnes grading 4.07% Cg and Inferred Mineral Resources of 13.1 million tonnes grading 2.87% Cg. As part of its work program, Micon will prepare an updated Mineral Resource Estimate evaluating revised cut-off grade parameters and current market pricing.

Next Steps

Following completion of the PEA, Zentek expects to use the results to define priority next steps for Albany, which may include:

- Advancing additional metallurgical work and product qualification
- Evaluating pilot-scale processing options
- Refining project execution and infrastructure concepts
- Considering the appropriate pathway for further engineering studies

Commentary

"This PEA is a key milestone as we work to re-rate the value of Albany based on its demonstrated potential in high-purity applications," said Mohammed (Moe) Jiwan, CEO of Zentek. "We have already proven at bench scale that Albany graphite achieves 5N+ purity using an electrothermal fluidized bed reactor, and we expect the PEA to translate that technical foundation into a current, NI 43-101-compliant economic framework. At the same time, North American and allied-nation demand for secure sources of ultra-high-purity graphite is accelerating as governments invest in energy security infrastructure, expand nuclear baseload capacity including small modular reactors (SMRs) to support AI and data centre growth, and work to rebuild critical mineral supply chains independent of foreign sources. With graphite designated a critical mineral by both Canada and the United States, and NATO allies prioritizing secure supply of strategic materials, we believe Albany is uniquely positioned to serve those markets."

Mr. Peter Wood, P.Eng., P.Geo., Vice President, Development of AGC, a "Qualified Person" under National Instrument 43-101, has approved the technical information contained in this news release.

About Albany Graphite

The Albany Graphite Project is an igneous-hosted graphite deposit located in Northern Ontario, held through the Company's wholly-owned subsidiary Albany Graphite Corp. Independent bench-scale testing conducted in collaboration with American Energy Technologies Company as previously disclosed by the Company on September 22, 2025, has confirmed that Albany graphite achieves ultra-high purity of 99.9992% with an equivalent boron concentration of 2.60 ppm, meeting benchmarks for potential nuclear-grade applications, and has demonstrated near-theoretical electrochemical performance for lithium-ion battery anodes. The project is being advanced as a potential domestic North American source of critical-grade graphite for nuclear, battery, and defence supply chains. Graphite is designated a critical mineral by both the Government of Canada and the United States Department of Energy.

About Zentek

Zentek Ltd. is a Canadian intellectual property development and commercialization company advancing a portfolio of graphene-enabled and advanced material technologies across clean air, next-generation materials, and critical minerals. The Company's core platforms are Albany Graphite, ZenGUARD™, and Triera.

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 accepts responsibility for the adequacy or accuracy of this release.

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