CleanTech Acquires 970 Acres of Mineral Rights Nearby Hicks Dome Rare Earth and Fluorspar Project in the Illinois-Kentucky Fluorspar District

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Vancouver, August 29, 2025 - CleanTech Vanadium Mining Corp. (TSXV: CTV) (OTCQB: CTVFF) ("CleanTech" or the "Company") is pleased to announce that, through its 100%-owned subsidiary, it has entered into a binding option-to-purchase agreement (the "OTP") with an arm's-length private party (the "Vendor") to acquire a package of highly prospective mineral rights ("Pope Fluorspar Properties") near Hicks Dome deposit in Pope county in southern Illinois. Pope Fluorspar Properties consist of 15 mineral rights parcels (each one a "Property") totaling 970 acres across Empire Subdistrict, Stewart Subdistrict and Hobbs Creek Subdistrict. Those Properties are strategically positioned along the major fault systems that historically controlled mineralization throughout the approximately 1,000-square-mile Illinois-Kentucky Fluorspar District ("IKFD").

Transaction Summary

Under the OTP executed on August 26, 2025, the Vendor agreed to sell to CleanTech, the Pope Fluorspar Properties for a total of US$184,000 (the "Purchase Price"), consisting of:

- US$29,100 upon OTP signing (paid);
- US$42,680 on or before September 1, 2026;
- US$54,320 on or before September 1, 2027;
- US$57,900 on or before September 1, 2028.

Empire Subdistrict: Home to Illinois' Premium Quality Fluorite

CleanTech's Empire Properties are adjacent to the historic Gaskin Mine, located less than three miles west of Hicks Dome, which is estimated to contain Fluorspar[1] and additional Rare Earth Element historical resources. The Gaskin operation stands as a testament to the Empire subdistrict's extraordinary mineral wealth, having produced approximately 179,000 raw tons from two parallel veins averaging 5 feet wide, with bedding replacement mineralized zones extending 35 feet in width[2].

The Gaskin Mine's reputation for producing some of the highest-grade and gemstone-quality fluorite in Illinois stems from its unique geological setting. According to ISGS Circular 604, the mine's fluorite crystals contained small amounts of rare earth elements (REE) likely derived from the adjacent Hicks Dome, creating distinctively colored pink cubic fluorite crystals with beautiful phantoms that are "instantly visually recognizable to the avid fluorite collector". Mining operations extended through multiple working levels at depths of 200, 300, 400, 425, 450, and 475 feet, with mineralized material present from the base of the Bethel Sandstone down into the Ste. Genevieve Limestone[3,4].

The Empire Subdistrict's mineralized veins appear predominantly along normal faults with northeast to east-northeast strikes, potentially representing radial fractures created by the vertical uplift at Hicks Dome or related to extensional forces that created the Dixon Springs Graben[5,6].

The Qualified Person has been unable to verify the above information and that information is not necessarily indicative to the mineralization on the Pope Fluorspar Properties.

Stewart Subdistrict: The Barnett Complex Legacy

The Stewart Subdistrict, where CleanTech now holds significant mineral rights, hosted some of the IKFD's most productive and deepest mining operations. The Barnett Mine complex, located 0.6 miles from CleanTech's Stewart Properties and situated along the same fault, operating from approximately 1950 to 1983, achieved notable production through shrinkage stoping methods on the West and Barnett veins. The operation reached a total depth of 240 meters (787 feet) and maintained working levels that accessing veins 7 to 8 feet wide composed of coarsely crystalline calcite containing blocks of country rock and pockets of fluorite, galena, and sphalerite[7].

Mining records indicate the Barnett complex produced an estimated 550,000 tons, while Ozark-Mahoning resource calculations from 1981 estimated historical Fluorspar resource exceeding 600,000 tons composed of 40% Barite and 20% Calcium Fluoride (CaF₂) on CleanTech's Stewart Properties. The Parkinson and Stockton mines, also located within the same subdistrict contributed additional production from underground workings targeting barite, calcite, fluorite, and sphalerite mineralization[8,9].

The key assumptions, parameters, and methods used to prepare this historical resource estimate are not available. The Company has not reviewed or validated the historic data, and caution should be taken as a qualified person has not conducted sufficient work to classify these historical resource estimates as a current mineral resource and the Company is not treating them as a current mineral resource. The historic resource does not demonstrate economic viability and should not be relied on. The Company considers the historical estimate relevant as it indicates significant Fluorspar mineralization within the project area; however, the reliability is uncertain given the age of the data, and differences between historical estimation methods and current Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Definition Standards. The historical resource categories were defined prior to the adoption of current CIM Definition Standards and differ materially from current categories such as 'Inferred Mineral Resource.' The historical estimates do not meet current CIM requirements for mineral resource classification due to: insufficient verification, lack of documented estimation methodology, and absence of QA/QC protocols. Steps to verify and upgrade the historical estimates to current CIM standards include (i) compilation and validation of all historical drill data, (ii) twin drilling of select historical holes, (iii) confirmatory drilling in key areas of mineralization, (iv) updated geological modeling, and (v) preparation of a new mineral resource estimate in accordance with NI 43-101.

Hobbs Creek Subdistrict: The Henson Mine Achievement

The Henson Mine within CleanTech's Hobbs Creek Properties represents one of the IKFD's most successful and technically challenging operations[10]. Operating during the 1980s, this mine reached a depth of 950 feet to access the Hobbs Creek Vein along a normal fault striking northeast and dipping steeply northwest. The operation extracted 112,000 raw tons of white and purple fluorite hosted in breccia zones of sandstone and shale fragments. The mine's success demonstrated the continued viability of deep vein mining in the IKFD, even as easier surface deposits were being exhausted[11].

Illinois-Kentucky Fluorspar District: America's Source of Fluorspar

The Illinois-Kentucky Fluorspar District extraordinary productivity stems from its unique geological architecture[12]. The IKFD sits within Mississippian-age limestones intersected by northwest-southeast trending normal faults, creating the perfect structural environment for fluorite mineralization. These steep fault-fill veins, breccia zones, and localized carbonate replacements developed along favorable limestone horizons, with mineralized material shoots typically thickening at structural complexities such as fault bends, step-overs, and fault-dike intersections[13,14,15,16].

The geological complexity that made the IKFD America's fluorite capital remains intact. mineralization occur in four primary deposit types: horizontal bedding replacement deposits, veins along vertical faults and fractures, residual gravel deposits, and fluorite breccia. This diversity offers multiple exploration and development targets across CleanTech's extensive land position of over 8,150 acres[17].

The IKFD's strategic importance extends beyond its historical production record. Its established transportation infrastructure, proximity to industrial consumers, and documented production of over 32.5 million tons position it as America's most viable domestic Fluorspar source in an increasingly import-dependent market. Currently, nearly all Fluorspar consumed in the United States is imported, with Mexico supplying 72% of 2017 imports, followed by China and South Africa[18,19,20]. Fluorspar prices have

increased dramatically from $300 per ton in 2020 to over $470 per ton in 2025[21]. China, which accounts for 60% of global Fluorspar production, has become a net importer of Fluorspar since 2023.

Ron Espell, CleanTech's President, Comments:

"With Fluorspar designated as critical for applications in nuclear power, lithium batteries, and semiconductors, CleanTech's Fluorspar projects represent more than an attractive mining investment-they are key to America's mineral independence.

"CleanTech has positioned itself at the epicenter of America's potential fluorite renaissance. CleanTech's land holding now exceeds 8,150 acres with over 730 historic drill holes, in the Illinois-Kentucky Fluorspar District which once supplied over 90% of U.S. Fluorspar production from approximately 1914 to 1995[22].

"CleanTech is looking forward to partnering with America's industrial Fluorspar users and federal agencies to accelerate the development of IKFD and re-write a new chapter in American Fluorspar mining history."

Qualified Person

The technical and scientific information contained in this news release has been reviewed and approved by Carlos Zamora, CPG, a member of the American Institute of Professional Geologists (AIPG) since 2024, who is an independent Qualified Person as defined by National Instrument 43-101.

About CleanTech Vanadium Mining Corp.

CleanTech is a mining company focused on critical mineral resources in the USA. The Company has an option to acquire 8,150 acres of mineral rights with historic Fluorspar resources across multiple projects in the Illinois-Kentucky Fluorspar District. CleanTech also owns a 100% interest in the Gibellini Vanadium Mine Project in Nevada.

Further information on CleanTech can be found at www.cleantechctv.com.

Map of Illinois-Kentucky Fluorspar District

To view an enhanced version of this graphic, please visit:
https://images.newsfilecorp.com/files/8597/264398_36939b6564f018a2_002full.jpg

ON BEHALF OF THE BOARD

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FORWARD-LOOKING INFORMATION

This news release contains "forward-looking information" and "forward-looking statements" (collectively,

"forward-looking information") within the meaning of applicable securities laws. Forward-looking information is generally identifiable by use of the words "believes," "may," "plans," "will," "anticipates," "intends," "could", "estimates", "expects", "forecasts", "projects" and similar expressions, and the negative of such expressions. Such forward-looking information, which reflects management's expectations regarding CleanTech's future growth, results of operations, performance, business prospects and opportunities, is based on certain factors and assumptions and involves known and unknown risks and uncertainties which may cause the actual results, performance, or achievements to be materially different from future results, performance, or achievements expressed or implied by such forward-looking information. Forward-looking information in this news releases includes: the acquisition of ownership in the Pope Fluorspar Properties, the presence of a land grab for fluorspar projects and Fluorspar as CleanTech's major vertical, logistical advantages at the Pope Fluorspar Properties, the ability to advance the Project in both the near and long term, the availability of infrastructure that would assist in the advancement of the Project. Forward-looking statements are based on the opinions and estimates of management of CleanTech at the date the statements are made and are based on a number of assumptions and subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking statements. Many of these assumptions are based on factors and events that are not within the control of CleanTech, there is no assurance they will prove to be correct and are not guarantees of future performance and actual results may differ materially from those in the forward-looking statements.

Forward-looking information involves significant risks and uncertainties, should not be read as a guarantee of future performance, events or results, and may not be indicative of whether such events or results will actually be achieved. A number of risks and other factors could cause actual results to differ materially from expected results discussed in the forward-looking information, including but not limited to: changes in operating plans; ability to secure sufficient financing to advance the Company's project; conditions impacting the Company's ability to mine at the project, such as unfavorable weather conditions, development of a mine plan, maintaining existing permits and receiving any new permits required for the project, and other conditions impacting mining generally; maintaining cordial business relations with strategic partners and contractual counter-parties; meeting regulatory requirements and changes thereto; risks inherent to mineral resource estimation, including uncertainty as to whether mineral resources will be further developed into mineral reserves; political risk in the jurisdictions where the Company's projects are located; commodity price variation; and general market, industry and economic conditions. Additional risk factors are set out in the Company's latest annual and interim management's discussion and analysis, available on SEDAR+ at www.sedarplus.ca.

Forward-looking information is based on reasonable assumptions by management as of the date of this news release, and there can be no assurance that actual results will be consistent with any forward-looking information included herein. Readers are cautioned that all forward- looking statements in this news release are made as of the date of this news release. The Company undertakes no obligation to update or revise any forward-looking information in this news release to reflect circumstances or events that occur after the date of this news release, except as required by applicable securities laws.

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[1] http://library.isgs.illinois.edu/Pubs/pdfs/circulars/c604.pdf
[2] http://library.isgs.illinois.edu/Pubs/pdfs/circulars/c604.pdf
[3] http://library.isgs.illinois.edu/Pubs/pdfs/circulars/c604.pdf
[4] https://ilmineswiki.web.illinois.edu/wiki/Empire_Subdistrict
[5] https://www.newsfilecorp.com/release/262229/CleanTech-Acquires-Significant-Package-of-Fluorspar-Projects-Totaling
[6] https://ilmineswiki.web.illinois.edu/wiki/Empire_Subdistrict
[7] https://ilmineswiki.web.illinois.edu/wiki/Stewart_Subdistrict
[8] https://ilmineswiki.web.illinois.edu/wiki/Stewart_Subdistrict
[9] https://ilmineswiki.web.illinois.edu/wiki/10083076
[10] Denny, F.B., Nelson, W.J., Breeden, J.R., & Lillie, R.C. (2020). Mines in the Illinois portion of the Illinois-Kentucky Fluorspar District. Illinois State Geological Survey, Circular 604, 73 p
[11] https://ilmineswiki.web.illinois.edu/wiki/Hobbs_Creek_Subdistrict
[12] Denny, F.B., Nelson, W.J., Breeden, J.R., & Lillie, R.C. (2020). Mines in the Illinois portion of the Illinois-Kentucky Fluorspar District. Illinois State Geological Survey, Circular 604, 73 p
[13] https://www.juniorminingnetwork.com/junior-miner-news/press-releases/3117-tsx-venture/ctv/185361-cleantech-acquire
[14] https://www.newsfilecorp.com/release/262229/CleanTech-Acquires-Significant-Package-of-Fluorspar-Projects-Totaling
[15] http://library.isgs.illinois.edu/Pubs/pdfs/circulars/c604.pdf
[16]

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