# FORM 51-102F3 MATERIAL CHANGE REPORT

### 1. NAME AND ADDRESS OF COMPANY

Terra Clean Energy Corp. Suite 2200, 885 West Georgia Street Vancouver, BC V6C 3E8

## 2. DATE OF MATERIAL CHANGE

October 15, 2024

# 3. PRESS RELEASE

The press release was issued on October 15, 2024 and was disseminated through the facilities of a recognized newswire services. A copy of the press release was filed on SEDAR.

# 4. SUMMARY OF MATERIAL CHANGE

Terra Clean Energy plans winter 2025 Exploration Program at South Falcon East Uranium Project, Athabasca Basin, Saskatchewan.

### 5. FULL DISCLOSURE OF MATERIAL CHANGE

# **Full Description of Material Change**

Vancouver, British Columbia, October 15, 2024 – **TERRA CLEAN ENERGY COFRP.** ("**Terra**" or the "**Company**") (**TSX.V: TCEC, OTCQB: TCEFF, FSE: T1KC**), is pleased to announce plans for an upcoming work program at its South Falcon East Uranium Project which hosts the Fraser Lakes B uranium Deposit.

The South Falcon East Project lies 18 km outside the edge of the Athabasca Basin, approximately 50 km east of the Key Lake uranium mill and former mine (Figure 1), approximately 7 km north of the powerline servicing the Key Lake operation. Terra Clean Energy Corp entered into an option agreement with SkyHarbour Resources Ltd. in October of 2022, whereby the company can earn up to a 75% interest in the South Falcon East property.

The Company is planning an extensive drill program for the winter of 2025. The program will consist of approximately 2,000 meters of drilling. The priority is to expand on the Winter 2024 program by extending the mineralized footprint associated with the Fraser Lakes B Uranium Deposit (Figure 2) and test nearby targets with prospective alteration and structure identified in historical drilling. The infill and step out drilling planned at Fraser Lake B will confirm the presence and continuity of existing mineralization and expand the footprint of the deposit; currently the mineralization is open both down dip and along strike. The results of infill and step-out drilling will aid in preparation of an updated NI 43-101 compliant resource estimate and deposit model for Fraser Lakes B.

The upgraded resource will also integrate other results not included in the historical resource estimate, including higher-grade mineralization encountered to date at Fraser Lakes B, intersected in drillhole FP-15-05. FP-15-05 returned 0.165% U<sub>3</sub>O<sub>8</sub> and 0.112% ThO<sub>2</sub> over 2.0 metres at 135.0 metres depth within a broader interval containing 0.103% U<sub>3</sub>O<sub>8</sub> and 0.062% ThO<sub>2</sub> over 6.0 metres at a depth of 134.5 m, and a second high grade intercept of 0.172% U<sub>3</sub>O<sub>8</sub> and 0.113% ThO<sub>2</sub> over 2.5 metres at 146.0 m depth. The mineralization at Fraser Lakes B is accompanied by anomalous pathfinder elements, including Bi, Mo, Pb, and Zn, that are also associated with ultra high-grade basement-hosted unconformity uranium deposits in the Athabasca Basin.

The Company's inaugural drill program in early 2024 (News Release dated April 1, 2024) at Fraser Lakes B confirmed the presence of uranium mineralized pegmatites and graphitic pelitic paragneiss along the Way Lake Conductor. Graphitic pelitic paragneiss are a key lithology associated with uranium deposits within the eastern Athabasca Basin, and their presence at Fraser Lakes B is a good indication of the potential for high-grade basement-hosted unconformity related uranium mineralization, in addition to the known pegmatite/alaskite-hosted uranium mineralization at the South Falcon East project.

While the Fraser Lakes B uranium deposit will remain a primary focus of early efforts on the property, the Company has ample additional drill-ready targets along the Way Lake conductor at South Falcon East. This includes the T-Bone Lake area, just north of Fraser Lakes B (Figure 2), where limited drilling encountered highly prospective clay alteration, anomalous radioactivity, and uranium mineralization (including up to 0.055% U<sub>3</sub>O<sub>8</sub> over 0.9 m at 39.5 metres depth in drillhole WYL-10-53) associated with a north-northwest trending fault cross-cutting the northeast-trending Way Lake conductor. The alteration encountered at T-Bone Lake is similar to that encompassing several high-grade basement-hosted uranium deposits in the eastern Athabasca Basin, including the former Eagle Point Mine and the Millenium uranium deposits. Regional drilling will focus on this area and other untested areas of structural complexity along the folded Way Lake conductor that are highly prospective for high-grade basement-hosted unconformity-related uranium mineralization and additional pegmatite-hosted uranium mineralization.

The upcoming field program is anticipated to commence in the new year and will be executed by Terralogic Exploration Inc. under the supervision of Laura Tennent, Project Manager with TerraLogic Exploration and C. Trevor Perkins, consulting geologist for Terra Clean Energy. The drilling program will be operating out of Skyharbour's McGowan Lake Camp with helicopter support for the daily drilling operations. The expected budget for this program is anticipated to be \$1.5 million.

"This is a unique setup for a Canadian microcap, one that offers multiple paths to significant value creation," said Alex Klenman, CEO of Terra Clean Energy. "We have an exceptional exploration opportunity that includes pursuing high-grade uranium discovery within already established mineralized zones, as well as testing thousands of hectares of geologically and geochemically favorable areas for new discovery, and to expand an early-stage uranium deposit. We get both the blue-sky opportunity where a drill hole can change a company's trajectory in an instant, and the safety of pursuing an asset-backed valuation. We're eager to continue drilling South Falcon and to unlock the abundance of value we believe the project contains," continued Mr. Klenman.

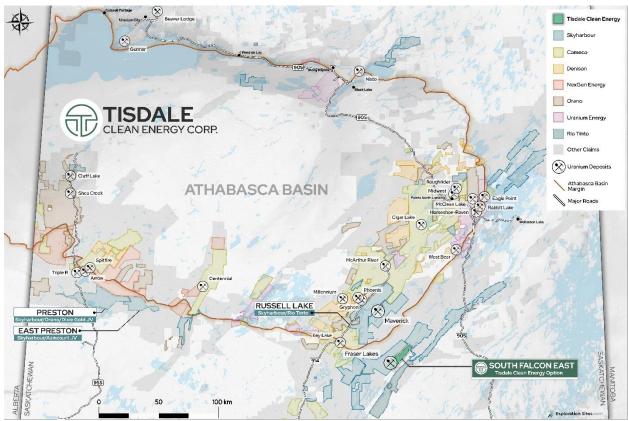


Figure 1: South Falcon East Project Location – Eastern Athabasca Basin, Saskatchewan, Canada

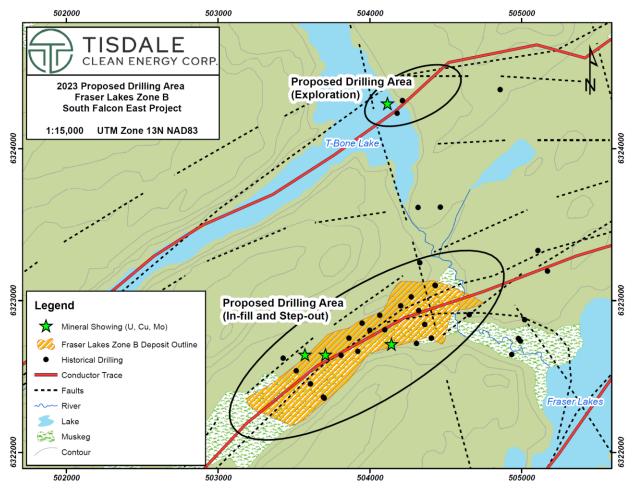


Figure 2: 2025 Drill Target areas at the south Falcon East Uranium Project with the folded Way Lake Conductor indicated in red. A North-northwest cross structure connects the Fraser Lake B and T-Bone Lake target areas.

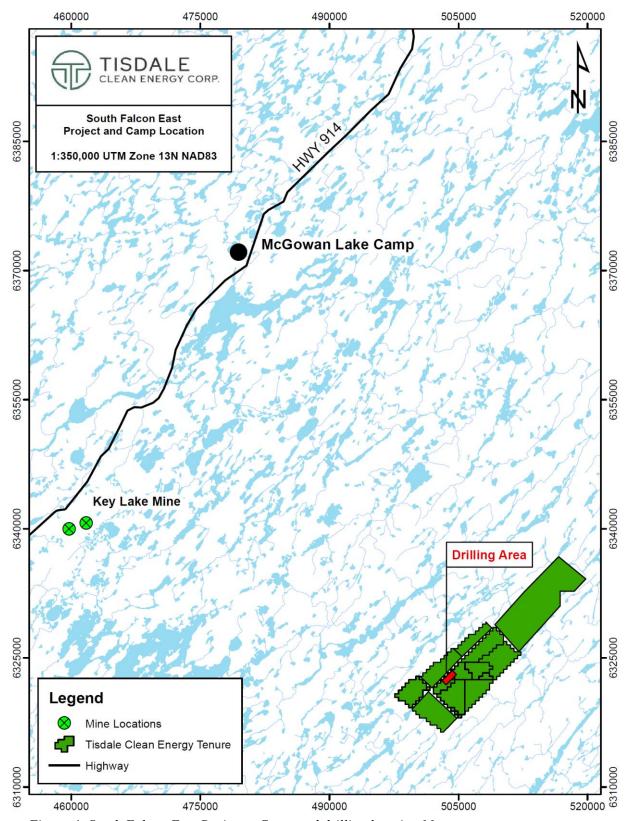


Figure 4: South Falcon East Project – Camp and drilling location Map

# **About the South Falcon East Project**

The South Falcon East Project is a uranium exploration project in the southeast Athabasca Basin and represents a portion of Skyharbour Resources Ltd.'s existing South Falcon Project. The project covers approximately 12,464 hectares and lies 18 kilometers outside the Athabasca Basin, approximately 50 kilometers east of the Key Lake Mine.

The South Falcon East Project contains the Fraser Lakes B Uranium/Thorium Deposit with a historic mineral resource\* of 6.9 Mlbs U3O8 inferred at a grade of 0.03% U3O8 and 5.3 Mlbs ThO2 inferred at a grade of 0.023 % ThO2. Uranium and thorium mineralization discovered to date is shallow classic Athabasca-style basement mineralization associated with well-developed EM conductors.

## About Terra Clean Energy Corp.

Terra Clean Energy (formerly Tisdale Clean Energy Corp) is a Canadian-based uranium exploration and development company. The Company is currently developing the South Falcon East uranium project, which holds a 6.96M pound inferred uranium resource within the Fraser Lakes B uranium/thorium deposit, located in the Athabasca Basin region, Saskatchewan, Canada.

## **Qualified Person**

The technical information in this news release has been prepared in accordance with the Canadian regulatory requirements set out in National Instrument 43-101 and reviewed on behalf of the company by C. Trevor Perkins, P.Geo., a Consulting Geologist for the Company, and a Qualified Person as defined by National Instrument 43-101.

\*The historical resource is described in the Technical Report on the South Falcon East Property, filed on sedar.com on February 9, 2023. The Company is not treating the resource as current and has not completed sufficient work to classify the resource as a current mineral resource. While the Company is not treating the historical resource as current, it does believe the work conducted is reliable and the information may be of assistance to readers.

#### ON BEHALF OF THE BOARD OF TERRA CLEAN ENERGY CORP.

"Alex Klenman"

Alex Klenman, Chief Executive Officer

## For further information please contact:

Alex Klenman, CEO Tel: 604-970-4330

info@tisdalecleanenergy.com

# **6. RELIANCE ON SUBSECTION 7.1(2) OF NATIONAL INSTRUMENT 51-102** Not applicable.

## 7. OMITTED INFORMATION

No information has been intentionally omitted from this form.

# 8. EXECUTIVE OFFICER

The name and business number of an officer of the Company through whom an executive officer who is knowledgeable about the material change and this report may be contacted is:

Alex Klenman Chief Executive Officer Tel: 604-970-4330

# 9. DATE OF REPORT

DATED this 15<sup>th</sup> day of October, 2024.