

**FORM 51-102F3
MATERIAL CHANGE REPORT**

Item 1 Name and Address of Company

Vortex Energy Corp. (the “**Company**”)
#1930 - 1177 West Hastings St.
Vancouver, British Columbia
Canada V6E 2K3

Item 2 Date of Material Change

July 24, 2023.

Item 3 News Release

The Company disseminated a news release announcing the material change described herein through the news dissemination services of Globe Newswire on July 24, 2023, and a copy was subsequently filed on SEDAR.

Item 4 Summary of Material Change

The Company announced the completion of a hydrogen storage capacity assessment for the East and West Salt Structures at the Robinsons River Salt Project (the “**Project**”).

Item 5 Full Description of Material Change

5.1 Full Description of Material Change

The Company announced the completion of a hydrogen storage capacity assessment for the East and West Salt Structures at the Project. The work was completed by the Company’s contracted consultant partner, RESPEC Consulting Inc. (“**RESPEC**”).

Highlights

- **East Salt Structure:** Based on available geological information, the East Salt Structure can potentially hold an estimated amount of (1) 550,000 tonnes of hydrogen in more than 35 caverns, based on conservative estimates, and up to (2) 900,000 tonnes of hydrogen in more than 53 caverns, using optimistic estimates. Using conservative estimates, the hydrogen storage capacity assessment for the East Salt Structure estimates that the total volume of the East Structure salt cavern field is more than 70 million m³.

- **West Salt Structure:** Based on the available geological information, the West Salt Structure can potentially hold an estimated amount of (1) 250,000 tonnes of hydrogen in more than 25 caverns, based on conservative estimates, and up to (2) 350,000 tonnes of hydrogen in more than 43 caverns, using optimistic estimates. Using conservative estimates, the hydrogen storage capacity assessment for the West Salt Structure estimates that the total volume of the West Structure salt cavern field is more than 50 million m³.

Hydrogen Storage Capacity Assessment

To conduct the hydrogen storage capacity assessment, RESPEC generated preliminary cavern layouts and performed high-level thermodynamic calculations to estimate the hydrogen storage capacity of the East and West Salt Structures based on the interpreted geology, operating pressure limits set by the Canadian Standards Association Z341 and the estimated cavern dimensions based on the Company’s gravity and 2D seismic interpretation of the salt dome structure at the Project.

Because the 2D seismic interpretation results on which the hydrogen storage capacity assessment is based decrease in accuracy with increased distance from the seismic lines, RESPEC generated conservative and optimistic cavern field layouts based on the distance from the seismic lines and distance from the salt dome core. The conservative case only considers salt caverns closer to the seismic lines and within the salt dome core whereas the optimistic case also includes caverns away from the core of the salt dome.

The placement and design of any salt caverns that are ultimately developed by the Company at the Project will be dependent on the local geology and the thickness of salt strata at the cavern well location. In generating the cavern field layout for the hydrogen storage capacity assessment, RESPEC assumed that caverns were placed at a spacing-to-diameter ratio of 4, at least 1.5 cavern diameter length away from the salt dome boundary, limited in diameter to 80 meters and located at least 200 m below the top of salt and 200 m away from the bottom of salt.

Qualified Person

The technical content of this material change report has been reviewed and approved by Piotr Kulkialka, P.Geol, who is acting as a consultant to the Company and is a “Qualified Person” as defined by National Instrument 43-101.

5.2 Disclosure for Restructuring Transactions

Not applicable.

Item 6 Reliance on Subsection 7.1(2) of National Instrument 51-102

Not applicable.

Item 7 Omitted Information

Not applicable.

Item 8 Executive Officer

For further information, please contact Paul Sparkes, Chief Executive Officer and Director of the Company, at (778) 819-0164 or via email to info@vortexenergycorp.com.

Item 9 Date of Report

July 26, 2023