

February 9, 2018

8100-4580-32640-02

Tamara Glowa, P.Ag.  
EH&S Regulatory Advisor  
Newalta Corporation  
211, 11<sup>th</sup> Avenue SW  
Calgary, Alberta T2R 0C6

Dear Ms Glowa,

**RE: EXTENDED INJECTIVITY TEST  
NEWALTA W STODDART 10-14-87-21; WA# 2777  
STODDART WEST FIELD – NORTH PINE FORMATION**

Commission staff have reviewed the application from CG Engineering Ltd., on behalf of Newalta Corporation, dated February 6<sup>th</sup>, 2018, requesting an extended injectivity test of 1,000 m<sup>3</sup> into the North Pine formation of the subject well.

The subject well was initially completed in the Belloy formation, which produced 14 e3m3 of gas from April 1975 until February 1986. In 2002, the Halfway formation was entered and tested for disposal purpose. Disposal approval was granted for the Halfway on September 16, 2002. In 2012, the Halfway was discovered to be pressured past the maximum reservoir pressure expectation for the zone. Newalta monitored pressure fall-off for several years, however in June 2016 the pressure still exceeded the limit. The Halfway zone was abandoned in September 2016, and completed in the uphole North Pine zone for disposal evaluation. An application for North Pine disposal submitted in December 2016 could not be granted due to nonconsent from the tenure rights holder. Tenure rights holder consent to the project now supports an updated application. Newalta has requested an extended injectivity test in order to determine the long-term economic viability of the zone, and to ensure that pump capacity on site is sufficient.

Attached please find **Order 18-02-003**, designating an area in the Stoddart West field, North Pine formation, as a Special Project under section 75 of the Oil and Gas Activities Act, for the temporary operation and use of a storage reservoir for the injection of produced water. This authorization does not warrant that a future disposal approval will be issued. Conditions 2e) and 2f) will ensure that a valid initial reservoir pressure test is obtained, and another reservoir pressure will be taken following the approved 1,000 m<sup>3</sup> injection volume. This will help to define the fill-up capacity of the reservoir, which will aid in the determination of long-term economic viability.

Additional general information regarding disposal wells is available on the Commission's website at <http://www.bcogc.ca/industry-zone/documentation/Subsurface-Disposal>.

Should you have any questions, please contact Michelle Harding at (250) 419-4493 or Ron Stefik at (250) 419-4430.

Sincerely,



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Ron Stefik, Eng. L.  
Supervisor, Reservoir Engineering  
Oil and Gas Commission

Attachment

Cc: Shawn Cody, CG Engineering



IN THE MATTER of the application from CG Engineering Ltd. on behalf of Newalta Corporation, to the Oil and Gas Commission (Commission), dated February 6<sup>th</sup>, 2018 for an extended injectivity test:

**ORDER 18-02-003**

1 Under Section 75(1)(d) of the *Oil and Gas Activities Act*, the Commission designates the temporary operation and use of a storage reservoir for the injection of produced water, including flowback from fracturing operations, in the Stoddart West field – North Pine formation as a special project in the following area:

DLS Twp 87 Rge 21 W6M Section 14 – Lsds 9, 10, 15 and 16

2 Under section 75(2) of the *Oil and Gas Activities Act*, the special project designation in this Order is subject to the following conditions. The Permit Holder shall:

- a) Inject produced water only into the well Newalta W Stoddart 10-14-87-21; WA# 2777 North Pine formation (perforations 1483.8 – 1486.5 mKB).
- b) Not exceed an injection pressure, measured at the wellhead on the subject well, of 11,000 kPag or the pressure required to fracture the formation, whichever is lesser.
- c) Inject only through tubing with a packer set as near as is practical above the injection interval.
- d) The total volume of injected water must not exceed 1,000 m<sup>3</sup>.
- e) Prior to starting the extended injectivity test approved under this Order, conduct a reservoir pressure test on the subject formation, with a shut-in period of sufficient length to provide data for calculation of the reservoir pressure, and submit a report of the test within 60 days of the end of the test.
- f) Following the volume limit outlined in condition 2d), conduct a reservoir pressure test.

  
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Ron Stefik, Eng. L.  
Supervisor, Reservoir Engineering  
Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this 9<sup>th</sup> day of February, 2018.