

August 31, 2012

8180-7400-32640-02

David Scarpino, P.Eng. Asset Team Lead Nexen Inc. 2900, 801-7<sup>th</sup> Ave, SW Calgary AB T2P 3P7

Dear Mr. Scarpino:

RE:

PRODUCED WATER DISPOSAL SPECIAL PROJECT

NEXEN INC. TSEA c-A16-I/94-O-08 (WA 27360)

**DEBOLT FORMATION** 

Oil and Gas Commission (Commission) staff have reviewed the application, dated July 20, 2012, requesting approval to dispose of produced water and fracture flowback fluid into the Debolt formation of the subject well.

Attached please find **Order 12-02-022**, designating an area in the Tsea field – Debolt formation a Special Project under section 75 of the <u>Oil and Gas Activities Act</u>, for use of a storage reservoir for the disposal of produced water and flowback from fracture operations generated from oil and gas operations, specifically, development of shale gas resources in the Horn River Basin.

The maximum wellhead pressure value of 1000kPa in condition 2(C) is set to provide a safety limitation as well as allow for operational flexibility. Currently the well is on vacuum as a result of a highly underpressured reservoir, therefore the limitation will not inhibit the disposal of the required volumes. The limitation was discussed and agreed upon with Nexen staff.

Should you have any questions, please contact Curtis Kitchen at (250) 419-4443 or Ron Stefik at (250) 419-4430.

Sincerely,

Richard Stocomb, P.Eng Deputy Commissioner

Oil and Gas Commission

Attachment

IN THE MATTER of the application from Nexen Inc., to the Oil and Gas Commission (Commission) dated July 20, 2012 for the operation and use of a storage reservoir.

## ORDER 12-02-022

1 Under Section 75(1)(d) of the *Oil and Gas Activities Act*, the Commission designates the operation and use of a storage reservoir for the disposal of produced salt water and flowback from fracturing operations into the Debolt formation – Tsea field as a special project in the following area:

NTS 94-O-08 Block I Unit 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:
  - a) Produced salt water, including flowback fluids, shall be injected only into the Debolt formation through the well Nexen Inc. Tsea c-A16-I/94-O-08 (Well Permit # 27360).
  - b) A record of volume disposed of through this well must be included on a Monthly Injection/Disposal Statement, in the prescribed form (BC-S18), which must be submitted to the Oil and Gas Commission not later than the 25<sup>th</sup> day of the month following the reported month.
  - c) The disposal/injection pressure at the wellhead must not exceed 1000 kPa.
  - d) A BC11 form must be submitted to the Ministry of Finance to notify of commencement of operations and update the well status.

Richard Stocomb, P.Eng Deputy Commissioner

Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this 3/ day of August 2012.