



December 20, 2010

9045-7400-32640-02

Jeff Smith, E.I.T  
Exploitation and Development  
Nexen Inc.  
801 – 7<sup>th</sup> Ave SW  
Calgary AB T2P 3P7

Dear Mr. Smith:

**RE: SALT WATER DISPOSAL SPECIAL PROJECT  
NEXEN INC. ETSHO b-H18-I/94-O-08; WA# 25945  
OTHER AREAS - DEBOLT FORMATION**

Commission staff have reviewed the information submitted September 23, 2010, in support of your application dated February 8, 2010, to dispose of produced water and completion/workover fluids resulting from fracture treatments of Horn River Basin shale gas formations into the Debolt formation of the subject well.

A water injectivity test was approved February 19, 2010. The required production test found the zone to be water bearing with no commercial hydrocarbons potential. A successful step-rate injection test and reservoir pressure test were performed. We concur that the subject well appears to be a good candidate for salt water disposal in the Debolt formation. Notice of your application was posted on the OGC website with no objections received.

Attached please find Order 10-02-009, designating the Other Areas – Debolt formation a Special Project under section 75 of the *Oil and Gas Activities Act*, for the operation and use of a storage reservoir for the disposal of salt water. This well will support an Experimental Scheme for shale gas production. The Commission understands that the subject well is intended primarily as a water source well to supplement fracture fluid requirements, with disposal optional on a contingent basis to the primary location disposal well b-16-I/94-O-08.

Please note that, as per section 75 of the *Drilling and Production Regulation*, a record of the volume of salt water disposed of through this well must be included on a Monthly Injection or Disposal Statement (BC-S18), which must be submitted to the Oil and Gas Commission no later than the 25th day of the month in which activity occurred. Also, the operation of the salt water disposal project will be subject to periodic review and the Commission may modify the Order, if deemed appropriate.

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

Sincerely,

Richard Slocomb, P.Eng.  
Supervisor, Reservoir Engineering  
Resource Conservation

Attachment

IN THE MATTER of the application from Nexen Inc. to the Commission dated February 8, 2010 for the operation and use of a storage reservoir.

**ORDER 10-02-009**

- 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 salt water or recovered fluids from a well completion or workover in the Other Areas – Debolt formation as a special project in the following area:  
  
NTS 94-O-08 Block I – Unit 18
  
- 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) Salt water shall be injected only into the Debolt formation (619.6 – 744.0 mKB) through the well b-H18-1/94-O-08 (WA # 25945).
  - b) The wellhead injection pressure must be continually measured and recorded, and must not exceed formation fracture pressure.
  - c) The Project shall be deemed to have commenced upon initiation of salt water injection into the well. The Supervisor, Reservoir Engineering, Resource Conservation, must be notified in writing within 72 hours of commencement of injection operations.

  
Alex Ferguson  
Commissioner  
Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this 20 day of December 2010.