

Nexen Inc.

Application for Four Well Licences and a Pipeline Licence Crossfield Field

December 9, 2008

ENERGY RESOURCES CONSERVATION BOARD

Decision 2008-122: Nexen Inc., Applications for Four Well Licences and a Pipeline Licence, Crossfield Field

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ENERGY RESOURCES CONSERVATION BOARD

Calgary Alberta

NEXEN INC.
APPLICATIONS FOR FOUR WELL LICENCES
AND A PIPELINE LICENCE
CROSSFIELD FIELD

Decision 2008-122 Applications No. 1493283, 1504244, 1504245, 1504248, and 1504249

1 DECISION

Having received Applications No. 1493283, 1504244, 1504245, 1504248, and 1504249, noting that they meet Energy Resources Conservation Board (ERCB/Board) requirements, and noting the receipt of confirmation of nonobjection from the intervening parties, the Board hereby approves Applications No. 1493283, 1504244, 1504245, 1504248, and 1504249.

2 INTRODUCTION

2.1 Applications

Applications No. 1504244, 1504245, 1504248, and 1504249

Nexen Inc. (Nexen) submitted four applications in accordance with Section 2.020 of the *Oil and Gas Conservation Regulations* for licences to drill four horizontal level-1 critical sour gas wells from an existing well pad in Legal Subdivision (LSD) 8 of Section 9, Township 26, Range 28, West of the 4th Meridian, to projected bottomholes in LSD 9-16-26-28W4M, LSD 16-10-26-28W4M, LSD 9-5-26-28W4M, and LSD 1-4-26-28W4M. The maximum hydrogen sulphide (H₂S) concentration expected to be encountered by the wells would be about 235.7 moles per kilomole (mol/kmol) (23.57 per cent), and the cumulative drilling and completion/servicing H₂S release rates would be 1.69 cubic metres per second (m³/s). The suspended/producing release rates would be 0.29 m³/s. The corresponding emergency planning zones (EPZs) would be 3.29 kilometres (km); however, Nexen has adopted an EPZ of 3.34 km for the drilling and completion/servicing of the wells. The EPZ for the suspended/producing case would be 0.98 km.

The purpose of the proposed four wells would be to obtain natural gas production from the Crossfield Member. The proposed wells would be located about 5.23 km northeast of the city limits of the City of Calgary.

Application No. 1493283

Nexen also submitted an application pursuant to Part 4 of the *Pipeline Act* for approval to construct and operate a pipeline to transport natural gas from the proposed wells located in LSD 8-9-26-28W4M to a pipeline tie-in at LSD 6-8-26-28W4M. The pipeline would be 2.76 km in length, with an outside diameter of 219.1 millimetres. The proposed pipeline would transport natural gas with a maximum H₂S concentration of 250.00 mol/kmol (25.00 per cent) and have a maximum calculated EPZ of 4.68 km. The proposed pipeline would be operated as a level-2 facility.

The closest portion of the proposed pipeline would be about 4.4 km northeast of the city limits of the City of Calgary.

2.2 Interventions

Patricia Rolston, Brenda Rolston, and Phil Norregaard, landowners and residents within the associated EPZ, filed an objection to the subject applications on May 10, 2007. Enid Pieschel is also a landowner within the associated EPZ and filed an objection to the subject applications on April 11, 2008. Concerns raised by these parties were related to the potential impact of future development on their lands, health issues, and water well quality and quantity. Other objections to the applications were withdrawn prior to the issuance of the notice of hearing.

2.3 Hearing

The applications and interventions were scheduled to be heard by the Board commencing on December 9, 2008.

3 DISCUSSION

Nexen engaged in ERCB-facilitated appropriate dispute resolution with Patricia Rolston, Brenda Rolston, Phil Norregaard, and their counsel Gavin Fitch and Enid Pieschel and her counsel Stanley Church. The meetings resulted in an agreement between parties, and on November 24 and 25, 2008, signed withdrawals of objections were received by the ERCB. Accordingly, the Board cancelled the scheduled hearing.

Dated in Calgary, Alberta, on December 9, 2008.

ENERGY RESOURCES CONSERVATION BOARD

<original signed by>
J. D. Dilay, P.Eng.
Presiding Member

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D. McFadyen
Board Member

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R. C. Clark Acting Board Member