

July 4, 2011

9045-8295/8550-59240-06

Jeff Smith, P. Eng. Exploitation Engineer Nexen Inc. 801 – 7th Avenue S.W. Calgary, AB T2P 3P7

Dear Mr. Smith:

RE: GOOD ENGINEERING PRACTICE APPROVAL
HORN RIVER FIELD – MUSKWA-OTTER PARK & EVIE FORMATIONS

The Commission has reviewed your application dated May 4, 2011, requesting approval of a Good Engineering Practice for an area within the Horn River Basin - Horn River formation.

Several recent wells have been drilled within the area of application, under Experimental Schemes. Gas recovery from this resource would benefit from the ability to produce horizontal wells in optimal locations, drilling from central pads.

The following Orders are attached:

- 1) Order 11-06-027 designating Good Engineering Practice within a portion of the regional Horn River field Muskwa-Otter Park and Evie shale gas formations as Special Project under section 75 of the *Oil and Gas Activities Act*, and
- 2) Order 11-06-027 OTN approving Other Than Normal Spacing under section 65.1 of the *Petroleum and Natural Gas Act* for the subject formations and area.

For regulatory purposes, the Commission designates the Middle Devonian aged Muskwa-Otter Park as a single formation, and the Evie shale as a separate zone. Therefore, wells completed within the Muskwa-Otter Park formation are not considered commingled, removing any requirement for application, notification or approval. Completing a wellbore for un-segregated production from both the Muskwa-Otter Park and the Evie will require submission of the form Notification of Commingled Production.

Please note that the following Experimental Scheme approvals are hereby terminated, the areas now included within the subject GEP approvals;

Approval 07-15-007 NEXEN SHALE GAS PROJECT #3

94-0-8

Block H - units 96-99

Block I - units 6-9, 14-20, 24-30

Block J - units 11 and 21.

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Approval 07-15-008 NEXEN SHALE GAS PROJECT #4

94-O-8 Block A - units 91-95

Block H - units 1-5, 11-15, 21-25.

94-P-5 Block D - unit 100

Block E - units 10, 20, and 30.

Any well already rig released within the Experimental Schemes will retain the remaining portion of the 3-year confidentiality period, however new wells will <u>not</u> obtain Experimental status. Final Progress Reports, required as a condition of the Experimental Scheme approvals, must be submitted to the Commission within 60 days of this date, regardless of the previous reporting cycle.

Please note that requests for changes to requirements for drilling samples, logging, reservoir pressure and flow testing, and commingled production are not addressed in this approval and should be applied for separately.

Should you have any questions, please contact Richard Slocomb at (250) 419-4421 or Travis Mercure at (250) 419-4448.

Sincerely,

Alex Ferguson

Commissioner

Oil and Gas Commission

Attachments

IN THE MATTER of an application from Nexen Inc. to the Commission dated May 4, 2011 for a Good Engineering Practice project.

ORDER 11-06-027

1 Under Section 75(1)(a) of the *Oil and Gas Activities Act*, the Horn River field – Muskwa-Otter Park and Evie formations is designated as a special project for the enhanced recovery of natural gas utilizing Good Engineering Practice within the following area;

NTS 94-O-08 Block A Units 91-95

Block G Units 11-13, 21-23, 31-33, 41-43, 51-53, 61-63, 71-73, 81-83, 91-93

Block H Units 1-5, 11-30, 34-40, 44-100

Block I Units 1-10, 14-20, 24-30, 34-40, 44-50

Block J Units 1-3, 11-13, 21-23, 31-33, 41-43

NTS 94-P-05 Block D Unit 100

Block E Units 10, 20, 30, 60, 70, 80, 90, 100

Block L Unit 10.

Alex Ferguson Commissioner

Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this 🗸 day of July 2011.

IN THE MATTER of an application from Nexen Inc. to the Commission dated May 4, 2011 for Other Than Normal Spacing.

ORDER 11-06-027-OTN

Under Section 65.1(2) of the Petroleum and Natural Gas Act, Other Than Normal Spacing is approved within the regional Horn River field Muskwa-Otter Park and Evie formations within the following area;

NTS 94-O-08 Block A Units 91-95

Block G Units 11-13, 21-23, 31-33, 41-43, 51-53, 61-63, 71-73, 81-83, 91-93

Block H Units 1-5, 11-30, 34-40, 44-100

Block I Units 1-10, 14-20, 24-30, 34-40, 44-50

Block J Units 1-3, 11-13, 21-23, 31-33, 41-43

NTS 94-P-05 Block D Unit 100

Block E Units 10, 20, 30, 60, 70, 80, 90, 100

Block L Unit 10.

- 2 Under section 65.1(3) of the Petroleum and Natural Gas Act, I specify the following:
 - a) the target area for a gas well completed within the project area is not nearer than 100m to the sides of the Other Than Normal Spacing area,
 - b) a gas well completed outside the specified target area may be subject to an off-target production penalty,
 - c) gas wells drilled within the specified project area are not subject to spacing requirements.

Richard Slocomb

Supervisor, Reservoir Engineering

Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this $\frac{4}{3}$ day of July 2011.