



Canadian Natural Resources Limited

Applications for Well, Pipeline and Facility Licences
Lindbergh Field

January 6, 2006

ALBERTA ENERGY AND UTILITIES BOARD

Decision 2006-003: Canadian Natural Resources Limited, Applications for Well, Pipeline, and Facility Licences, Lindbergh Field

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ALBERTA ENERGY AND UTILITIES BOARD

Calgary Alberta

	Decision 2006-003
CANADIAN NATURAL RESOURCES LIMITED	Applications No. 1400023, 1400026,
APPLICATIONS FOR WELL, PIPELINE	1400027, 1400028, 1400031, 1426987,
AND FACILITY LICENCES	1426991, 1426993, 1426994, 1426995,
LINDBERGH FIELD	1426996, 1426997, 1403095, 1403907,
	1406138, and 1430378,

1 DECISION

Having completed a review of the applications, the Alberta Energy and Utilities Board (EUB/Board) hereby approves Applications No. 1400023, 1400026, 1400027, 1400028, 1400031, 1426987, 1426991, 1426993, 1426994, 1426995, 1426996, 1426997, 1403095, 1403907, 1406138, and 1430378.

2 INTRODUCTION

2.1 Applications

Canadian Natural Resources Limited (Canadian Natural) applied to the EUB, pursuant to Section 2.020 of the *Oil and Gas Conservation Regulations*, for licences to drill 21 vertical and slant oil wells from seven multiwell pad locations and one single-well location. The maximum hydrogen sulphide (H₂S) concentration for all of the proposed wells would be 0.0 moles per kilomole (mol/kmol) (0.0 per cent). The purpose of all of the wells would be to obtain crude bitumen production from the Sparky Member in accordance with crude bitumen production scheme 8069C. The proposed wells are

- one slant well and one vertical well to be drilled from a surface location of Legal Subdivision (LSD) 5, Section 2, Township 58, Range 5, West of the 4th Meridian with bottomhole locations of LSD 12-2-58-5W4M and LSD 5-2-58-5W4M (cited in Application No. 1400023);
- 2 slant wells and one vertical well to be drilled from a surface location of LSD 15-2-58-5W4M with bottomhole locations of LSD 3-11-58-5W4M, LSD 16-2-58-5W5M, and LSD 15-2-58-5W4M (cited in Application No. 1400026);
- 2 slant wells and one vertical well to be drilled from a surface location of LSD 1-11-58-5W4M with bottomhole locations of LSD 7-11-58-5W4M, LSD 2-11-58-5W4M, and LSD 1-11-58-5W4M (cited in Application No. 1400027);
- 4 slant wells and one vertical well to be drilled from a surface location of LSD 14-11-58-5W4M with bottomhole locations of LSD 13-11-58-5W4M, LSD 12-11-58-5W4M, LSD 11-11-58-5W4M, LSD 11-11-58-5W4M, and LSD 14-11-58-5W4M (cited in Application No. 1400028);

- one vertical and one slant well to be drilled from a surface location of LSD 8-2-58-5W4M with bottomhole locations of LSD 8-2-58-5W4M and LSD 2-2-58-5W4M (cited in Application No. 1403095);
- one vertical and one slant well to be drilled from a surface location of LSD 4-2-58-5W4M with bottomhole locations of LSD 4-2-58-5W4M and LSD 3-2-58-5W4M (cited in Application No. 1403097);
- 2 slant wells and one vertical well to be drilled from a surface location of LSD 3-14-58-5W4M with bottomhole locations of LSD 5-14-58-5W4M, LSD 4-14-58-5W4M, and LSD 3-14-58-5W4M (cited in Application No. 1400031); and
- one vertical well to be drilled from a surface location of LSD 5-11-58-5W4M with a bottomhole location of LSD 5-11-58-5W4M (cited in Application No. 1378692).

Canadian Natural had submitted seven applications in accordance with Section 7.001 of the *Oil and Gas Conservation Regulations* requesting approval to construct and operate one single-well battery and six multiwell batteries in the Lindbergh Field. The seven proposed well site batteries would comprise on-lease flow lines and storage tanks. The purpose of the proposed batteries would be to measure and temporarily store production from the proposed wells.

The proposed single-well battery location is LSD 5-11-58-5W4M (Application No. 1400608). The proposed multiwell battery locations are LSD 3-14-58-5W4M (Application No. 1400610); LSD 14-11-58-5W4M (Application No. 1400612); LSD 15-2-58-5W4M (Application No. 1400613); LSD 1-11-58-5W4M (Application No. 1400615); LSD 5-2-58-5W4M (Application No. 1400604); LSD 4-2-58-5W4M (Application No. 1400605); and LSD 8-2-58-5W4M (Application No. 1400606).

Canadian Natural has also applied in accordance with Part 4 of the *Pipeline Act* for approval to construct and operate seven pipelines. All seven pipelines are to be constructed for the purpose of transporting natural gas containing 0.0 mol/kmol (0.0 per cent) H₂S and would have an outside diameter of 114.3 millimetres. The proposed pipeline routes (as detailed in Application No. 1406138) and their proposed lengths are detailed below:

- a pipeline from LSD 8-3-58-5W4M to LSD 5-2-58-5W4M about 0.7 kilometres (km) long;
- a pipeline from LSD 4-2-58-5W4M to LSD 8-3-58-5W4M about 0.35 km long;
- a pipeline from LSD 3-14-58-5W4M to LSD 14-11-58-5W4M about 0.51 km long;
- a pipeline from LSD 14-11-58-5W4M to LSD 1-10-58-5W4M about 1.47 km long;
- a pipeline from LSD 8-2-58-5W4M to LSD 5-1-58-5W4M about 0.63 km long;
- a pipeline from LSD 4-12-58-5W4M to LSD 1-11-58-5W4M about 0.83 km long; and
- a pipeline from LSD 1-11-58-5W4M to LSD 15-2-58-5W4M about 0.53 km long.

All of the above would be about 13 km northeast of Lindbergh, Alberta.

2.2 Intervention

Alfred Kestutis, Philip Marc, and Peter Craig Opanavicius (the Opanavicius family) are the landowners of Section 2-58-5W4M, Section 11-58-5W5M, and LSD 3-14-58-5W4M. The Opanaviciuses objected to the well, pipeline, and facility development proposed by Canadian Natural. Canadian Natural and the Opanaviciuses did engage in discussions and participated in facilitation meetings in an effort to resolve the outstanding issues.

2.3 Hearing

The Board was scheduled to hold a public hearing in Bonnyville, Alberta, on November 8, 2005, before Board Members J. R. Nichol, P.Eng. (Presiding Member) and T. M. McGee and Acting Board Member R. N. Houlihan, Ph.D., P.Eng.

3 DISCUSSION

The Board issued a Notice of Hearing on August 12, 2005. Prior to the scheduled hearing, the Opanaviciuses and Canadian Natural engaged in meetings and discussions that resulted in Canadian Natural agreeing to certain changes to the proposed pipeline routes and an adjustment to the location of the single well in LSD 5-11-58-5W4M. As a result, the Board was provided with a withdrawal of objection by the Opanaviciuses on October 17, 2005. Following receipt of the withdrawal, as there were no longer objections registered against the approval of the applications, the hearing was cancelled on October 21, 2005.

The adjustment to the well site necessitated a new application, which was given Application No. 1430378 and was submitted to the EUB on November 18, 2005. The LSD location for Application No. 1430378 is still LSD 5-11-58-5W4M, and the changes that necessitated the new application are solely due to a slight altering of the surface coordinates.

The changes to the pipeline routes were received by the EUB on December 21, 2005, and Application No. 1406138 was amended to reflect the changes. Therefore, the pipeline routes listed above and stated in the Notice of Hearing issued on August 12, 2005, have changed. The amended pipeline routes are detailed below:

- a pipeline from LSD 15-2-58-5W4M to LSD 8-2-58-5W4M about 1.09 km long;
- a pipeline from LSD 16-3-58-5W4M to LSD 15-2-58-5W4M about 1.98 km long;
- a pipeline from LSD 2-11-58-5W4M to LSD 1-11-58-5W4M about 0.55 km long;
- a pipeline from LSD 8-3-58-5W4M to LSD 4-2-58-5W4M about 1.11 km long;
- a pipeline from LSD 1-10-58-5W4M to LSD 5-11-58-5W4M about 0.63 km long;
- a pipeline from LSD 8-10-58-5W4M to LSD 16-10-58-5W4M about 1.14 km long;
- a pipeline from LSD 16-10-58-5W4M to LSD 3-14-58-5W4M about 0.43 km long; and
- a pipeline from LSD 3-14-58-5W4M to LSD 14-11-58-5W4M about 0.70 km long.

Therefore, as the current applications meet all of the EUB's regulatory requirements, the Board approves these applications and directs that the licences be issued in due course.

Dated in Calgary, Alberta, on January 6, 2006.

ALBERTA ENERGY AND UTILITIES BOARD

(Original Signed by)

J. R. Nichol, P.Eng.
Presiding Member

(Original Signed by)

T. M. McGee
Board Member

(Original Signed by)

R. N. Houlihan, Ph.D., P.Eng.
Acting Board Member