



November 20, 2018

0210-2600-07

Joanna Shea
Resource Development Manager
Aitken Creek Gas Storage ULC
10th Floor, 1111 West Georgia Street
Vancouver, BC V6E 4M3

Dear Ms. Shea:

**RE: APPROVAL AMENDMENT FOR UNDERGROUND NATURAL GAS STORAGE
SECTION 75, OIL AND GAS ACTIVITIES ACT
AITKEN CREEK NORTH FIELD; BLUESKY "A" POOL**

Oil and Gas Commission (Commission) staff have reviewed the application, dated August 31, 2018 requesting approval for additional lateral and vertical area of the Aitken Creek North Gas Storage Reservoir.

The subject pool was approved for storage of natural gas in August 1999, with storage operations beginning in 2012. In April of 2016, Fortis BC acquired the Aitken Creek Storage and the Aitken Creek North Storage projects. Soon after, discussions with the BC Ministry of Energy, Mines and Petroleum Resources (MEMPR), Titles branch and the OGC began in an effort to increase the buffer around the Aitken Creek North Storage pool. The Commission and MEMPR agree that additional protection is reasonable and does not compromise royalty income to the province.

Attached please find Approval Order 99-07-001, designating an area in the Aitken Creek North field, Bluesky "A" pool as a Special Project under section 75 of the Oil and Gas Activities Act, for the operation and use of an Underground Natural Gas Storage Reservoir. This Order includes a number of detailed operational conditions. This approval does not prevent other rights holders from drilling through the project area to access rights for which they have title.

Should you have any questions, please contact Michelle Gaucher at (250) 419-4482 or Ron Stefik at (250) 419-4430.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. Stefik', is written over a horizontal line.

Ron Stefik, Eng. L.
Supervisor, Reservoir Engineering
Oil and Gas Commission

Attachment



IN THE MATTER of an application from Aitken Creek Gas Storage ULC to the Commission dated August 31, 2018 for the development and use of the Aitken Creek North field Bluesky 'A' pool for underground natural gas storage pool, including bounding formations for integrity protection.

ORDER 99-07-001 Amendment #2

1. Under Section 75(1)(a) of the Oil and Gas Activities Act, the Aitken Creek North field Bluesky 'A' pool, including all stratigraphic formations from the top of the Spirit River formation to the base of the Nordegg formation, are designated as a special project for storage of natural gas within the following area;
 - 94-A-13 Block L – Units 98–100
 - 94-B-16 Block I – Unit 91
 - 94-G-01 Block A – Units 1, 11-15, 21-25, 31-35, 41-45, 51-55, 61-65, 74, 75, 84, 85
 - 94-H-04 Block D – Units 8–10, 18-20, 28-30, 36-40, 46-50, 60 and 70.
2. Under section 75(2) of the Oil and Gas Activities Act, I specify the following:
 - a) The underground natural gas storage project must be designed, constructed, operated and abandoned in accordance with the relevant sections of CSA Standard Z341-98, as amended from time to time.
 - b) Inject natural gas only, into the Bluesky 'A' pool.
 - c) Not exceed an injection pressure, measured at the wellhead, of 18,250 kPag or the pressure required to fracture the formation, whichever is lesser.
 - d) Continually measure and record the wellhead casing and tubing pressures electronically.
 - e) Cease injection upon reaching a maximum formation pressure of 13,020 kPaa, measured at the datum depth of 1268.0 mCF.
 - f) Cease injection and notify the Commission immediately if hydraulic isolation is lost in the wellbore or formation.
 - g) Include the injection and production operating hours and the maximum injection pressure value on the monthly storage statement.
 - h) A progress report must be submitted to the Commission within 60 days after the end of each calendar year the project is in operation. The progress report must contain the following:
 - i. the volume of gas injected into and produced from the pool, on a monthly, annual and cumulative basis,
 - ii. the net volume of gas stored in the pool on a monthly basis, after commencement of operations,
 - iii. representative compositions of the gas injected into and produced from the pool during the reporting period,

iv. a summary of the pressure data measured in the pool during the reporting period,

ORDER 99-07-001 Amendment #2

Page 2

- v. a summary of changes or modifications in the operation of the project during the reporting period, including well workovers, recompletions and suspensions, or any surface facility modifications,
- vi. interpretations of the performance of the project including an updated material balance analysis with an estimation of the maximum and minimum reservoir pressure attained during the report period, and a discussion of any anomalous behavior,
- vii. current operating capability of the project including working gas, cushion gas, maximum and minimum deliverability/injectivity and maximum injection pressure and minimum injection pressure.
- i) This approval or any condition of it may be modified or rescinded for non-compliance with terms of this approval, the Petroleum and Natural Gas Storage Reservoir Regulation, the Oil and Gas Activities Act or as may be required to address revised interpretation resulting from new data or information.



Ron Stefik, Eng. L.
Supervisor, Reservoir Engineering
Oil and Gas Commission

DATED AT the City of Victoria, in the Province of British Columbia, this 20th day of November, 2018.