

December 3, 2024 8200-4510-32640-02

Seymour Monteiro, P.Eng. Sr Development Engineer Coelacanth Energy Inc. Suite 2110, 530 - 8th Avenue SW Calgary, AB T2P 3S8

Dear Mr. Monteiro:

RE: PRODUCED WATER DISPOSAL SPECIAL PROJECT APPROVAL COELACANTH TWO RIVERS 14-5-83-16 (WA #12253)
TWO RIVERS FIELD – SIPHON 'A' POOL

The Regulator has reviewed the application submitted by Benoit Regulatory Compliance Inc. on behalf of Coelacanth Energy Inc., date May 9th, 2024, requesting approval for disposal of produced water into the Two Rivers field Siphon 'A' pool via the subject well.

The subject well was drilled and completed open-hole into the Cadomin formation in 1999. However, the Cadomin formation was not utilized, and the well was re-entered, deepened, and completed into the Siphon 'A' pool in 2000. Oil and gas were produced from the Siphon 'A' pool from 2000 until 2009. The Nikanassin 'A' pool was completed and briefly produced gas in December of 2005 and January of 2006 but was later suspended. Starting in 2011 and continuing to date, the well has been used as a pressure maintenance waterflood injection well in the Siphon 'A' pool. Production of the Siphon 'A' pool ceased in December of 2023.

Attached please find **Order 24-02-003**, designating an area in the Two Rivers field, Siphon 'A' pool, as a Special Project under section 75 of the Energy Resource Activities Act, for the operation and use of a storage reservoir for the injection of produced water. This Order includes a number of detailed operational, measurement and reporting conditions. Disposal wells are subject to regular field inspection and audit. Contravention of a condition of this Order may be subject to enforcement under section 62 of ERAA, or suspension or cancellation of the Order under section 75(2)(b).

For the inspection requirement of Order condition 2l), please arrange via email to OGCPipelines.Facilities@bcogc.ca.

Disposal of fluid with high total dissolved solids content requires adjustment of the wellhead injection pressure to remain below formation fracture pressure. It is the responsibility of the permit holder make adjustments to wellhead injection pressure.

Should you have any questions, please contact Logan Gray at (250) 419-4465 or the undersigned at (250) 419-4430.

Sincerely,

Ron Stefik, P.L.Eng.

Supervisor, Reservoir Engineering

Energy Regulator

Attachments



IN THE MATTER of the application from Benoit Regulatory Compliance Inc. on behalf of Coelacanth Energy Inc., dated May 9th, 2024, requesting disposal approval:

ORDER 24-02-003

- 1. Under Section 75(1)(d) of the *Energy Resource Activities Act*, the Regulator designates the operation and use of a storage reservoir for produced water, including flowback from fracturing operations, in the Two Rivers Field Siphon 'A' pool as a special project in the following area:
 - DLS Twp 83 Rge 16 W6M Section 5 LSDs 11 to 14
- 2. Under section 75(2) of the *Energy Resource Activities Act*, the special project designation in this Order is subject to the following conditions. The Permit Holder shall:
 - a) Inject water into the well *Coelacanth Two Rivers 14-5-83-16; WA# 12253* Siphon 'A' pool from 1,306.0 1,308.8 mKB.
 - b) Not exceed an injection pressure, measured at the wellhead on the subject well, of 9,250 kPag or the pressure required to fracture the formation, whichever is lesser.
 - c) Inject only through tubing with a packer set as near as is practical above the injection interval.
 - d) Continually measure and record the wellhead casing and tubing pressures electronically.
 - e) Alarm the casing-tubing annulus pressure monitoring system to indicate when casing pressure varies outside the normal operating range.
 - f) Cease injection and notify the Regulator at Reservoir@bc-er.ca immediately if there are any indications that hydraulic isolation is lost in the wellbore or formation.
 - g) Conduct and submit an annual Surface Casing Vent Flow test to the Regulator within 30 days of the completion of the test.
 - h) Conduct an annual reservoir pressure test on the formation in the subject well, with a shut-in period of sufficient length to provide data for calculation of the reservoir pressure, and submit a report of the test within 60 days of the end of the test.
 - i) Cease injection upon reaching a maximum formation pressure of 12,250 kPaa, measured at 1.307.4 mKB.
 - j) i) Perform a casing inspection log on the subject well and submit results to the Regulator within 30 days of the completion of logging, at an interval of not more than every 10 years, commencing from the date of initial disposal.
 - ii) Perform a hydraulic isolation temperature log on the subject well and submit results to the Regulator within 30 days of the completion of logging, at an interval of not more than every 5 years, commencing from the date of initial disposal.
 - k) Not conduct a hydraulic fracture stimulation on any formation in the subject well without prior Regulator approval.
 - I) Complete an inspection, satisfactory to the Regulator, within 4 weeks of initial disposal operations.

Ron Stefik, P.L.Eng.

Supervisor, Reservoir Engineering

Energy Regulator

DATED AT the City of Victoria, in the Province of British Columbia, this 3rd day of December 2024.



Advisory Guidance for Order 24-02-003

- I. A production packer must be set above the injection interval and the space between the tubing and casing filled with corrosion and frost inhibiting fluids, as per section 16(2) of the Drilling and Production Regulation.
- II. Annual packer isolation tests are required to be conducted and the associated report must be submitted to the Regulator within 30 days of test completion, as per section 16(3) of the Drilling and Production Regulation.
- III. Injected fluids must be metered and the injection pressure measured at the wellhead, as per section 74 of the Drilling and Production Regulation.
- IV. A monthly disposal statement including the volume of disposal fluid, maximum wellhead injection pressure, and total operating hours must be submitted to the Regulator via Petrinex not later than the 20th day of the month following the reported month, as per section 75 of the Drilling and Production Regulation.
- V. Seismic events must be reported and disposal operations suspended as per section 21.1 of the Drilling and Production Regulation.