

September 18, 2026

1600-7400-32640-02

Tyler McDonald
Advisor, Environment & Regulatory
R360 Environmental Solutions Canada Inc.
1900, 140-10 Ave SE
Calgary, AB T2G 0R1

Dear Mr. McDonald:

**RE: NON-HAZARDOUS WASTE AND PRODUCED WATER DISPOSAL
SPECIAL PROJECT APPROVAL; AMENDMENT #4
R360 CANADA E BLUEBERRY d-A96-K/94-A-12 (WA# 27939)
BLUEBERRY EAST FIELD - DEBOLT FORMATION**

Approval for disposal of non-hazardous waste and produced water into the Debolt formation through the subject well was issued on May 24, 2012. The approval was amended on March 10, 2015, March 22, 2018, and September 12, 2018.

The Regulator has amended the approval to update the Order conditions and to provide additional information, as outlined in this cover letter. This amendment does not alter the approved injection interval, maximum wellhead injection pressure, or maximum formation pressure.

Please note that, pursuant to section 50(2)(b) of the Petroleum and Natural Gas Act, PNG tenure only authorizes the storage or disposal of natural gas, produced water, and other substances associated with petroleum or natural gas exploration, production, or processing. A Storage Reservoir License may also authorize the storage or disposal of non-associated CO₂. The BCER recognizes that minor incidental quantities of other wastes may be unavoidably commingled within authorized waste streams.

The Permit Holder must maintain a valid permit under the Environmental Management Act (EMA) for the disposal of non-hazardous waste. The applicable EMA permit is 106728.

Attached is Order 12-02-009 Amendment #4, which replaces Order 12-02-009 Amendment #3 and continues the special project designation under section 75 of the Energy Resource Activities Act for the operation and use of a storage reservoir for non-hazardous waste and produced-water disposal. The Order includes updated operational, monitoring and reporting conditions, including changes to seismicity reporting. Disposal wells are subject to field inspection and audit. Contravention of an Order condition may be subject to enforcement under section 62 of the Act, or suspension or cancellation of the Order under section 75(2)(b).

Should you have any questions, please contact Logan Gray at (250) 419-4465 or the undersigned at (250) 419-4482.

Sincerely,



Michelle Gaucher, P.Eng.
Supervisor, Reservoir Engineering
BC Energy Regulator

Attachment



ORDER 12-02-009 Amendment #4

1. Under section 75(1)(d) of the Energy Resource Activities Act, the Regulator designates the operation and use of a storage reservoir for the disposal of produced water and non-hazardous waste into the Debolt formation in the Blueberry East field as a special project in the following area:

NTS 94-A-12 Block K Unit 96

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 produced water and non-hazardous waste only into the well R360 Canada E Blueberry d-A96-K/94-A-12, WA# 27939, Debolt formation from 2,179 to 2,203 mKB MD.
- b) Hold a valid permit under the Environmental Management Act for the disposal of non-hazardous waste.
- c) Not exceed an injection pressure measured at the wellhead on the subject well of 18,500 kPag, or the pressure required to fracture the formation, whichever is less.
- d) Inject only through tubing with a packer set as near as is practical above the injection interval.
- e) Continually measure and record the wellhead casing and tubing pressures electronically.
- f) Alarm the casing-tubing annulus pressure monitoring system to indicate when casing pressure varies outside the normal operating range.
- g) Maintain and operate a monitoring program to observe and record seismic events within a 5 km radius of the subject well that:
 - i. is capable of real-time monitoring
 - ii. detects events of magnitude 2.5 Mw and greater
 - iii. determines hypocentres to an accuracy of ± 500 metres
- h) Maintain and operate an accelerometer within 2.5 km of the wellsite that records three components of ground acceleration with a minimum detectability of 0.8%g and a dynamic range of $\pm 2g$. For each event of 0.008g or greater, or each felt event, submit the SEED file containing the instrument response and waveform from 30 seconds before the observed event to 60 seconds after the observed event.
- i) Submit seismicity monitoring results, including the date, time, location, magnitude, ground acceleration and depth of seismic events, to the Regulator at Reservoir@bc-er.ca at one-year intervals or upon request.
- j) Submit seismic event details immediately, via email to SeismicMonitoringDL@bc-er.ca for any felt events or events of magnitude 3.0 or greater.
- k) 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.
- l) Conduct and submit an annual Surface Casing Vent Flow test to the Regulator within 30 days of completion of the test.
- m) Conduct an annual reservoir pressure test 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.
- n) Cease injection upon reaching a maximum formation pressure of 22,860 kPaa, measured at 2,181.8 mKB TVD.
- o)
 - i) Perform a casing inspection log on the subject well and submit the results to the Regulator within 30 days of 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 the results to the Regulator within 30 days of completion of logging, at an interval of not more than every 5 years, commencing from the date of initial disposal.

- p) Not conduct a hydraulic fracture stimulation on any formation in the subject well without prior Regulator approval.



Michelle Gaucher, P.Eng.
Supervisor, Reservoir Engineering
BC Energy Regulator

DATED AT the City of Victoria, in the Province of British Columbia, this 18th day of September, 2026.

Advisory Guidance for Order 12-02-009 Amendment #4

- 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.