

The BC Energy Regulator (“BCER” or “Regulator”) is requesting information from interested parties that have the capacity to provide consulting services in the 2024/2025 fiscal year to conduct a groundwater sampling program in the Peace Region.

The groundwater sampling program will involve monitoring and sampling of up to twenty-nine existing monitoring wells in the Summer/Fall of 2024, installation of up to five dataloggers, and a preliminary screening of the 2024 groundwater quality data against previous (2018-2021) groundwater quality data to assess changes in geochemical conditions.

The outcomes of this work will assist with understanding trends in groundwater baseline chemistry, subsurface methane conditions and groundwater levels, as well as with understanding potential cumulative effects on groundwater quality from energy resource activity in the Peace Region.

## Organizational Vision and Mission

The BCER’s Vision is of a resilient energy future where B.C.’s energy resource activities are safe, environmentally leading, and socially responsible.

The BCER regulates the full life cycle of energy resource activities in B.C., from site planning to restoration, ensuring activities are undertaken in a manner that:

- protects public safety and the environment
- supports reconciliation with Indigenous peoples and the transition to low-carbon energy
- conserves energy resources
- fosters a sound economy and social well-being.

The BCER’s current legislated mandate, regulatory framework, core activities and organizational structure are described in the [2024/25 - 2026/27 Service Plan Report](#) available on the BCER’s website at [www.bc-er.ca](http://www.bc-er.ca).

## RFI Objective

This RFI seeks to identify a consulting firm to conduct a groundwater sampling program in the Peace Region in the summer/fall of 2024.

The scope of the groundwater sampling program is as follows:

1. collect representative groundwater samples from up to 29 existing groundwater monitoring wells for analysis of the following parameters:
  - a) **Field:** water level, temperature, pH, electrical conductivity, dissolved oxygen, and oxidation-reduction potential.
  - b) **Chemical:** major and minor cations, trace metals, anions (F, Cl, NO<sub>3</sub>, HCO<sub>3</sub>, PO<sub>4</sub>, SO<sub>4</sub>), ammonia (NH<sub>4</sub>), alkalinity, hardness, dissolved inorganic carbon, and total dissolved solids.
  - c) **Dissolved gases:** CH<sub>4</sub>, C<sub>2</sub>H<sub>6</sub>, C<sub>3</sub>H<sub>8</sub>, He, O<sub>2</sub>, N<sub>2</sub>, and CO<sub>2</sub>.
  - d) **Isotopes:** δ<sup>18</sup>O and δ<sup>2</sup>H of water, δ<sup>13</sup>C and δ<sup>2</sup>H of methane and δ<sup>13</sup>C of CO<sub>2</sub> (on samples with sufficient concentrations of methane), and δ<sup>13</sup>C of DIC.
2. install dataloggers in up to five selected wells to enable measurement of water levels.
3. populate an existing groundwater quality database (Excel spreadsheet) with the 2024 data.
4. prepare a brief report describing methodologies and preliminary screening of groundwater data.

Pertinent information regarding locations of monitoring wells, monitoring well installation details, previous sampling methodologies, and other logistical information can be found in Ladd et al. (2021)<sup>1</sup>: [Paper 35 \(Final\).vp \(geosciencebc.com\)](#).

The expected Project deliverables are as follows:

1. Brief report that includes the following:
  - a) description of the groundwater sampling and datalogger installation methods,
  - b) tabulated water level and groundwater quality data,
  - c) laboratory analytical reports,
  - d) results of preliminary screening of the 2024 groundwater quality data against the 2018-2021 groundwater quality data.
2. An updated groundwater quality database (Excel spreadsheet, including digital file) that includes the 2024 groundwater quality data and the previous (2018-2021) groundwater quality data. Existing data will be provided to the successful consultant by BCER.

Timeline for final submission of project deliverables is December 20, 2024.

## Project Funding and Services Agreement

The project will be funded by the BC Oil and Gas Research and Innovation Society (BC OGRIS), and the Services Agreement for this project will be between the successful consultant and BC OGRIS.

The maximum budget available for this project is \$84,000 (inclusive of GST).

BCER staff will be available to provide in-kind support, as needed, on items related to site and well access, well selection for sampling and installation of dataloggers, and field support (e.g., providing second person for some of the more remote wells). Dataloggers will be provided by the BCER.

## RFI Submission

Responses will be evaluated using the following criteria:

- Capacity of consulting firm to conduct the work in the summer or fall of 2024
- Experience with sampling and evaluating groundwater quality in the Peace Region
- Number of wells that can be monitored, sampled, and analyzed for the parameters listed above in the available budget (please note wells have not been sampled since 2020-2021).

Respondents are requested to provide a concise and focused response to this RFI. Responses are requested in the following format:

- brief company profile (1 page maximum)
- name of a key contact person, including telephone number, and email address
- information related to selection criteria
- other required information specific to the nature of this RFI and deemed important by respondent.

<sup>1</sup> Ladd, B., Cahill, A.G., Goetz, M., Allen, A., Welch, L., Mayer, B., van Geloven, C., Kirste, D. and Beckie, R.D. (2020): Installation of a purpose-built groundwater monitoring well network to characterize groundwater methane in the Peace Region, northeastern British Columbia (NTS 093P/09-16, 094A/01-08); in Geoscience BC Summary of Activities 2019: Energy and Water, Geoscience BC, Report 2020-02, p.131-144.



# Request for Information # RFI54525001

This RFI may be used to pre-qualify or screen vendors for a subsequent competitive bidding process, if any. If subsequent competitive bidding opportunities are issued, the BCER is under no obligation to advise any vendor responding to this RFI. Vendors are advised to monitor the B.C. Bid website ([bcbid.gov.bc.ca](http://bcbid.gov.bc.ca)) or the BCER's procurement page (<https://procurement.bc-er.ca/>) for any such opportunities, which will be open to all vendors regardless of whether or not a response to this RFI has been submitted.

All responses to this RFI become the property of the BCER and will be held in confidence, subject to the provisions of the *Freedom of Information and Protection of Privacy Act*. Respondents to this RFI consent to the BCER incorporating any submitted ideas, concepts, approaches, or strategies into any planning, design, procurement, or contractual activities related to any aspect of the project without any obligation, liability, or consideration on the part of the BCER. The BCER will not be responsible for any costs incurred by any vendor in responding to this RFI.

Interested parties are invited to respond to this RFI by submitting a response to the BCER at <https://procurement.bc-er.ca/> by 2:00 PM (PST) on **March 15, 2024**. Responses must reference RFI54525001.

**All enquiries** related to this Request for Information, including any requests for clarification, are to be submitted by **March 12, 2024** and directed, by Email, to [procurement@bc-er.ca](mailto:procurement@bc-er.ca), who will provide responses on <https://procurement.bc-er.ca/> if time permits. Information obtained from any other source is not official and should not be relied upon. Enquiries and any responses will be recorded and may be distributed to all respondents at the BCER's option.