



NWT OFFICE OF THE REGULATOR OF OIL AND GAS OPERATIONS

Office of the Regulator of Oil and Gas Operations

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Lorne Hammer  
Director  
Canadian Petroleum Engineering Inc.  
900, 600 6 AVE SW  
CALGARY AB T2P 0S5

May 17, 2023

Dear Lorne Hammer:

**Information Request No. 4: Aurora Training Well Abandonment (OA-2022-001-AC)**

On December 12, 2022, the Office of the Regulator of Oil and Gas Operations (OROGO) received a complete Operations Authorization (OA) application from Canadian Petroleum Engineering Inc. on behalf of Aurora College for the abandonment of the Aurora Training Well G-04 (WID1915) in the Gwich'in Settlement Area. OROGO also received Aurora College's response to Information Request No. 1 on February 6, 2023, Information Request No. 2 on March 1, 2023, and Information Request No. 3 on May 1, 2023.

OROGO has reviewed the information provided by Aurora College and requires additional information to complete its review of Aurora College's OA application, as set out in the attached Information Request No. 4.

Please send your written responses and any associated correspondence to OROGO at [oro.go@gov.nt.ca](mailto:oro.go@gov.nt.ca) or through OROGO's secure file transfer site, on or before 4:00 pm on May 24, 2023. If you are unable to respond within this timeframe or have any questions, please contact OROGO at 867-767-9097 or by email at [oro.go@gov.nt.ca](mailto:oro.go@gov.nt.ca).

Sincerely,

Pauline de Jong  
Regulator

Encl. Information Request No. 4

c Jonathan Michel, Director Aurora Campus, Aurora College  
Glenda Vardy Dell, President, Aurora College  
Ron McCosh, Canadian Petroleum Engineering Inc.

**Information Request No. 4**  
**Aurora Training Well G-04 Abandonment**  
**OA-2022-001-AC**

#### **4.1 Proposed Schedule of Operations**

**Preamble:**

On April 20, 2023, the Regulator directed Aurora College to:

- Complete pre-abandonment gas migration (GM) testing for the Aurora Training Well G-04 (WID1915) no later than four weeks before the beginning of operations.
- Provide OROGO with a schedule for the operation that includes GM testing, equipment mobilization, and completion of the operation.

In its response to Information Request No. 3, submitted on May 1, 2023, Aurora College provided the required program schedule. However, this schedule indicates that GM testing will occur on August 3, 2023, with well abandonment operations to follow immediately, ending on August 9, 2023. The proposed schedule does not respond to the Regulator's direction on the timing of GM testing.

The proposed schedule also does not include equipment mobilization.

**Request:**

Provide a revised schedule of operations that reflects the Regulator's April 20, 2023, direction and includes:

- GM testing between July and September 2023 and no later than four weeks before the beginning of operations (more information on GM testing requirements can be found in section 4A of the *Well Suspension and Abandonment Guidelines and Interpretation Notes*).
- Equipment mobilization.

#### **4.2 Insurance Coverage**

**Preamble:**

**Section 8 of** Aurora College's revised application package, submitted on May 1, 2023, indicates that Aurora College has requested proof of insurance and will provide it to OROGO when it is received from the Insurers. This statement has not changed from the original application package, submitted to OROGO on December 12, 2022.

OROGO requires proof of insurance to assess Aurora College's financial ability to carry out the well abandonment as planned, including the ability to fully implement its safety plan,

environmental protection plan, and contingency plans (see page 14 of the *Application Guidelines and Interpretation Notes – Well Suspension and Abandonment*).

**Request:**

Provide a deadline by which Aurora College commits to submitting proof of insurance to OROGO.

### **4.3 Proof of Financial Responsibility**

**Preamble:**

In its response to Information Request 3.4, received on May 1, 2023, Aurora College proposes to provide \$60,000 in Proof of Financial Responsibility for the operation. Aurora College's response:

- Indicates that "soil would be removed until no trace of contamination is evident" and identifies a cost for "monitoring and testing". It is not clear whether these costs include analysis of soil samples.
- Does not identify a disposal location for contaminated soil and other materials. The disposal location could substantially affect the cost of spill clean-up.
- Does not include the cost or source of clean fill to backfill soil removed and disposed of during the clean-up.

**Request:**

Submit a revised cost estimate that:

- Clarifies whether analysis of soil samples is included.
- Identifies the disposal location with associated costs.
- Includes the cost and source of clean fill.

### **4.4 Safety Plan – List of Safety-Critical Items**

**Preamble:**

Section 8 of the *Oil and Gas Drilling and Production Regulations* (OGDPR) sets out the required contents of a Safety Plan. Section 8(e) of the OGDPR requires a list of safety structures, facilities, equipment and systems and a summary of the system in place for their inspection, testing and maintenance.

Information Request 3.5 requested an updated Safety Plan that addresses section 8(e) of the OGDPR and reflects the expectations established in section 5D of the *Safety Plan Guidelines and Interpretation Notes*.

The updated Safety Plan submitted by Aurora College on May 1, 2023, lists some safety-critical equipment but does not contain a comprehensive list of safety-critical equipment for the operation, which could include:

- Blow-out preventer (with appropriate rating)
- Pressure vessels / flare stack (in the event gas is encountered during the operation)

- Medical services

**Request:**

Submit an updated Safety Plan that addresses section 8(e) of the OGDPR and reflects the expectations established in section 5D of the *Safety Plan Guidelines and Interpretation Notes*.

#### **4.5 Contingency Plan – Links to Other Plans**

**Preamble:**

The updated Contingency Plan submitted by Aurora College on May 1, 2023, is acceptable when read in conjunction with Aurora College's Safety Plan and Environmental Protection Plan. However, as a stand-alone document, the procedures to be followed in the case of an emergency are not always clear.

For example, the Contingency Plan does not address hazard identification, ranking, and mitigation on a case-by-case basis. Instead, it refers to the Safety Plan.

Section 5A of the *Contingency Plan Guidelines and Interpretation Notes* states that "linkages to relevant emergency response information in other plans should be included in the Contingency Plan".

**Request:**

Submit an updated Contingency Plan with explicit references to the Safety Plan and Environmental Response Plan where appropriate.

#### **4.6 Contingency Plan – Training**

**Preamble:**

Section 6(j) of the OGDPR sets out the required contents of a Contingency Plan. More specifically, section 5D of the *Contingency Plan Guidelines and Interpretation Notes* speaks to the requirements of the Plan to address training.

Information Request 3.10 requested an updated Contingency Plan that addresses section 6(j) of the OGDPR and reflects the expectations established in section 5D of the *Contingency Plan Guidelines and Interpretation Notes*.

Aurora College's response to Information Request 3.10 does not identify specific training required of employees and sub-contractors for this operation.

**Request:**

Submit an updated Contingency that addresses section 6(j) of the OGDPR and reflects the expectations established in section 5D of the *Contingency Plan Guidelines and Interpretation Notes*. Specifically, describe the training that will be required of employees and sub-contractors for this operation.

## **4.7 Backfilling**

### **Preamble:**

In the section of its May 1, 2023, submission titled “Operations Management System”, sub-section “Backfill the bell shaped hole”, Aurora College proposes to backfill the hole left after cutting and capping the wellbore to return the surface to existing ground level.

Given that the well is in a permafrost rich area, the backfill should be mounded to prevent water ponding and subsidence of the land in the vicinity of the excavation.

### **Request:**

Submit an updated document that reflects mounding the backfill to prevent water ponding and subsidence.