



NWTF OFFICE OF THE REGULATOR OF OIL AND GAS OPERATIONS

Office of the Regulator of Oil and Gas Operations

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Bill Peterson  
Senior VP, Development Operations  
Canadian Natural Resources Ltd.  
Suite 2100, 8500 – 2 ST SW  
CALGARY AB T2P 4J8

June 04, 2019

Dear Bill Peterson:

**Information Request No. 4:  
Canadian Natural Resources Ltd. Application  
for an Operations Authorization for Well Abandonments (OA-2018-005)**

On November 26, 2018, the Office of the Regulator of Oil and Gas Operations (OROGO) received a complete application from Canadian Natural Resources Ltd. (CNRL) for an Operations Authorization (OA). The OA covers the proposed abandonment of thirteen wells operated by CNRL in the Fort Liard area.

On December 17, 2018, the then Chief Conservation Officer, James Fulford, issued direction to CNRL to provide a number of additional pieces of information related to the well abandonments and the interim inspection of the wells in question, which CNRL provided on May 23, 2019.

OROGO has reviewed the additional information provided by CNRL on May 23, 2019, and requires additional information in order to complete its review of CNRL's OA application, as set out in the attached Information Request No. 4.

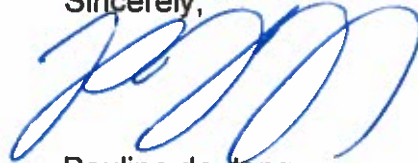
Please send your written responses and any associated correspondence to me by email at [oro.go@gov.nt.ca](mailto:oro.go@gov.nt.ca) or through OROGO's secure file transfer site.

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Please submit your response on or before 4:00 p.m. on July 15, 2019. If you are unable to respond within this timeframe or have any questions, please contact me at (867)767-9097 or by email at [pauline\\_dejong@gov.nt.ca](mailto:pauline_dejong@gov.nt.ca) .

Sincerely,



Pauline de Jong  
Chief Conservation Officer

Attachment

- c. Arly Castillo, Regulatory Coordinator, Canadian Natural Resources Ltd.

**Canadian Natural Resources Ltd. (CNRL)**  
**Application for an Operations Authorization (OA-2018-005)**  
**Information Request No. 4**

**4.1 Management Systems**

**Preamble:** Section E.1 of CNRL's OA application identifies that CNRL has several management systems in place to integrate operations and technical systems, including a Safety Management System and Emergency Management, Asset Integrity, Security, Technical Safety and Environmental Protection Programs. While these management systems have been identified by CNRL, they have not been provided as part of this application and therefore the Office of the Regulator of Oil and Gas Operations (OROGO) is unable to determine if they meet the requirements of section 5 of the *Oil and Gas Drilling and Production Regulations* (OGDPR).

**Request:** Please provide all management systems that are in place so that OROGO can verify that they meet the requirements of section 5 of the OGDPR. Please also provide a concordance table to demonstrate where these management systems meet the requirements of section 5 of the OGDPR.

**4.2 Schedule and Execution Plan**

**Preamble:** Section E.2.a of CNRL's OA application identifies that CNRL has a schedule and execution plan that will be evaluated annually. While these plans have been identified by CNRL, they have not been provided as part of this application and therefore the Office of the Regulator of Oil and Gas Operations (OROGO) is unable to determine if they meet the requirements of section 6(a) and (b) of the OGDPR or reflect the requirements of the *Well Suspension and Abandonment Guidelines and Interpretation Notes* (the Guidelines).

This request was also made in IR1, issued on November 27, 2018, which requested: "A detailed schedule for the proposed work that will see all wells abandoned by the January 31, 2023 deadline, identifying which wells will be abandoned in which winter work season and prioritizing the abandonment of non-compliant wells [wells not compliant with the Guidelines]".

CNRL's response to IR1, dated December 13, 2018, was unsatisfactory, stating that CNRL "intends to complete the abandonment work in a single season", but failing to identify which season and explicitly stating that the non-compliant wells "will not be specifically prioritized".

**Request:** Please provide a schedule and execution plan that identifies the specific winter work season(s) in which the abandonments will be completed and which prioritizes the abandonment of the non-compliant wells.

### 4.3 Safety Plan

**Preamble:** Section E.2.b of CNRL's OA application identifies that CNRL has a Safety Management System in place. While this system has been identified by CNRL, it has not been provided as part of this application and therefore the Office of the Regulator of Oil and Gas Operations (OROGO) is unable to determine if it meets the requirements of section 8 the OGDPR.

**Request:** Please provide a safety plan so that OROGO can verify that it meets the requirements of section 8 of the OGDPR. Please also provide a concordance table to demonstrate where the safety plan meets the requirements of section 8 of the OGDPR.

### 4.4 Environmental Protection Plan

**Preamble:** In Section E.2.c of CNRL's OA application, CNRL states that, since activities are planned to be within existing lease boundaries and approved road access, it is anticipated they will have no material effect on the environment. Additionally, in section 5 of CNRL's OA application, CNRL identifies that two Environmental Protection Plans were submitted as part of the land use permitting process through the Mackenzie Valley Land and Water Board, one of which was submitted in attachment #4 to this application.

**Request:** Please provide a concordance table to demonstrate where the Environmental Protection Plan submitted in attachment #4 meets the requirements of section 9 of the OGDPR.

### 4.5 Flaring and Venting

**Preamble:** Section E.2.d of CNRL's OA application identifies that CNRL will keep flaring or venting events to a minimum and the operations do not include provisions for well testing.

Section 6(e) of the OGDPR requires that an application for an OA include "information on any proposed flaring or venting of gas, including the rationale and the estimated rate, quantity and period of the flaring or venting".

Section 67(a) of the OGDPR states that no operator shall flare or vent gas unless "it is otherwise permitted in the approval ... or in the authorization".

**Request:** Please explain why CNRL does not plan to test the wells and how CNRL will maintain safe operations without this testing. Please also provide an estimate of the rate, quantity and period of flaring or venting as required by section 6(e) of the OGDPR.

### 4.6 Well Control Equipment

**Preamble:** Section E.2.f of CNRL's OA application identifies that the risk of well control issues is low and well servicing and control equipment will be selected based on well specific conditions in accordance with Alberta

Energy Directive 37 and will be supplied within the well authorization applications.

**Request:** Please provide CNRL's existing data with respect to the condition of the wells (reservoir pressure, H<sub>2</sub>S concentration and wellhead flange rating).

Based on the above information, please provide details on the pressure rating / class of Blow Out Preventer(s) CNRL will be using during the abandonments.

#### **4.7 Emergency Management System**

**Preamble:** Section E.2.h of CNRL's OA application identifies that CNRL has an Emergency Management System in place that includes Incident Command System, Detailed Emergency Response Procedures, Resources, Training and Exercises. While this system has been identified by CNRL, it has not been provided as part of this application and therefore OROGO is unable to determine if it meets the requirements of section 6(j) the OGDPR.

**Request:** Please provide contingency plans and emergency response procedures as required by section 6(j) of the OGDPR. Please also provide a concordance table to demonstrate where these plans meet the requirements of section 6(j)(i) of the OGDPR.

#### **4.8 Decommissioning and Abandonment Activities**

**Preamble:** Section E.2.i of CNRL's OA application identifies that CNRL will provide a description of the decommissioning and abandonment activities as provided in their well authorizations. No further detail describing the abandonment activities was provided.

Section 6(k) of the OGDPR requires that an application for an authorization include "a description of the decommissioning and abandonment of the site, including methods for restoration of the site after its abandonment".

**Request:** Please provide an overview of CNRL's anticipated approach to the planned decommissioning and abandonment operations, as required by 6(k) of the OGDPR.