



December 13, 2018

**SENT VIA EMAIL**

**James Furlford**

Chief Conservation Officer,  
**Office of the Regulator of Oil and Gas Operations**  
Government of the Northwest Territories  
P.O. Box 1320  
Yellowknife NT  
X1A 2L9

**RE: INFORMATION REQUEST NO.: 1  
CANADIAN NATURAL RESOURCES LIMITED  
REQUEST FOR EXTENSION TO DEADLINE FOR ABANDONMENT  
OF NON-COMPLIANT SUSPENDED WELLS (OA-2018-005)**

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Canadian Natural Resources Limited (Canadian Natural) is hereby responding to the Office of the Regulator of Oil and Gas Operations (OROGO) information request No. 1 letter dated November 27, 2018.

**Extension Rationale**

A detailed risk assessment, following Canadian Natural's Corporate Risk Matrix, was conducted for each non-compliant well. This evaluation included a combination of likelihood of occurrence, and the potential consequence.

The results of the risk assessment identified 6/9 wells fell into an acceptable risk level. The remaining 3 wells were identified as having tolerable risk, however, with increased inspection frequency would be deemed at an acceptable level. The assessments and probability for failures was made under the understanding that the wells will be downhole abandoned within a 5 year period.

The risk assessments will be reviewed annually following site inspections. A summary of the Risk Assessment results is included.

**Canadian Natural Resources Limited**

Suite 2100, 855 - 2nd Street SW, Calgary, Alberta, T2P 4J8 T 403.517.6700 F 403.514.7677 www.cnrl.com



### **Detailed Schedule**

Due to the relatively low count of wells and significant logistical work to organize, Canadian Natural intends to complete the abandonment work in a single season. The non-compliant wells will be considered in the scheduling, however, given the results of the risk assessment they will not be specifically prioritized.

Exact order of operations will need the final design and approval of the downhole abandonment program, as well as coordination with winter road building and site access. This will not be possible to scope until closer to planned execution.

CNRL respectfully requests that the final abandonment operations will result in the wells being abandoned prior to March 31, 2023 to take full advantage of the winter season.

### **Confirmation of Benefit Plan**

Canadian Natural confirms that a Benefit Plan was submitted to Mr. Ian Butters, Manager, Oil and Gas Rights, Department of Industry, Tourism and Investment, Government of the Northwest Territories on November 20, 2018. Mr. Butters responded to Canadian Natural on November 29, 2018, stating that Canadian Natural approach to the Benefit Plan was approved. Please see attached correspondence.

If you have any questions, please contact the undersigned at [arly.castillo@cnrl.com](mailto:arly.castillo@cnrl.com) or at (403) 514-7637.

Yours truly,  
**CANADIAN NATURAL RESOURCES LIMITED**

Arly Castillo  
Regulatory Coordinator

**Arly Castillo**

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**From:** Ian Butters <Ian\_Butters@gov.nt.ca>  
**Sent:** Thursday, November 29, 2018 1:58 PM  
**To:** Arly Castillo  
**Cc:** Anne-Marie Jennings; Ryan N Munro  
**Subject:** RE: Canadian Natural Resources Limited- Benefit Plan letter and attachment

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This email was received from an external email address. Verify the source and the purpose of this email before opening any attachments or clicking on any embedded links.

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Hi Arly,

The timing and content of your benefit plan submission is entirely up to CNRL. The only qualification I would add is that before an operator can commence work or activity on any petroleum lands that are subject to an interest, section 20 of the Petroleum Resources Act ("PRA") provides that the Minister of Industry, Tourism and Investment must have approved, or waived the requirement of approval of, a benefits plan in respect of the work or activity, so you will need have a record of the Minister's decision before OROGO will issue you an authorization to alter a well.

So to answer your question ... yes we approve of your proposed approach.

Regards,

IanB

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**From:** Arly Castillo [<mailto:Arly.Castillo@cnrl.com>]  
**Sent:** Thursday, November 29, 2018 1:33 PM  
**To:** Ian Butters  
**Cc:** Anne-Marie Jennings; Ryan N Munro  
**Subject:** RE: Canadian Natural Resources Limited- Benefit Plan letter and attachment

Good afternoon,

Thank you for your response. As stated on Canadian Natural's letter the Benefit Plan will be completed and submitted to your attention closer to each group of wells abandonment, reclamation and remediation schedule. Could you please clarify that you are approving Canadian Natural's approach via this email?

Thank you

Arly Castillo

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**From:** Ian Butters [[mailto:Ian\\_Butters@gov.nt.ca](mailto:Ian_Butters@gov.nt.ca)]  
**Sent:** Thursday, November 22, 2018 3:25 PM  
**To:** Arly Castillo  
**Cc:** Anne-Marie Jennings  
**Subject:** RE: Canadian Natural Resources Limited- Benefit Plan letter and attachment

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opening any attachments or clicking on any embedded links.

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Hi Arly,

I'm just sending this response to acknowledge the receipt of your letter advising the GNWT's Petroleum Resources Division to be expecting future submissions of Benefit Plans for your proposed well abandonment, reclamation and remediation program as described in your letter.

If you have any questions regarding our Benefit Plans filing Guidelines, our content expectations or about our review and approval process please contact me directly using the phone number in my signature block below.

Regards,

IanB

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T. Ian Butters  
Manager, Oil and Gas Rights  
Minerals and Petroleum Resources Division  
Department of Industry, Tourism and Investment  
Government of the Northwest Territories  
P.O. Box 3019  
Inuvik, NT X0E 0T0  
Phone: (867) 777-7484 | Fax: (867) 777-5105  
Email: [ian\\_butters@gov.nt.ca](mailto:ian_butters@gov.nt.ca)  
Web: <http://www.iti.gov.nt.ca> [[iti.gov.nt.ca](http://www.iti.gov.nt.ca)]

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**From:** Arly Castillo [<mailto:Arly.Castillo@cnrl.com>]  
**Sent:** Tuesday, November 20, 2018 1:39 PM  
**To:** Ian Butters  
**Cc:** Pauline DeJong  
**Subject:** Canadian Natural Resources Limited- Benefit Plan letter and attachment

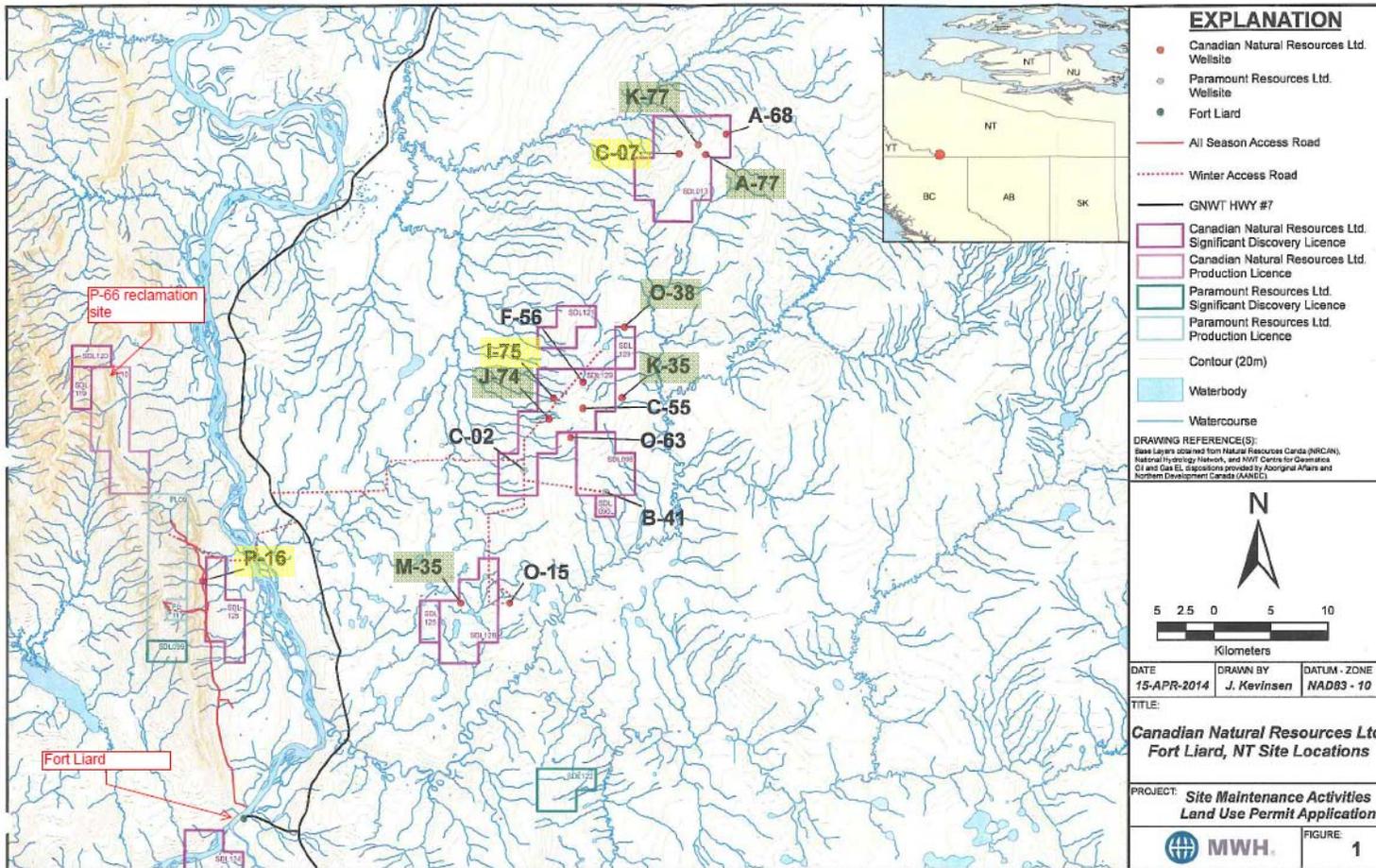
Good afternoon,

Canadian Natural Resources Limited (Canadian Natural) is submitting for your attention and review its Benefit Plan letter and attachment as directed by NWT OROGO, Ms. Pauline de Jong. Canadian Natural has applied in parallel to the NWT OROGO office for its Operation Authorization approval today November 20, 2018. If you have any questions, please contact me.

Thank you

Arly Castillo  
Regulatory Coordinator

# Fort Liard Non-Compliant Wells Risk Assessment



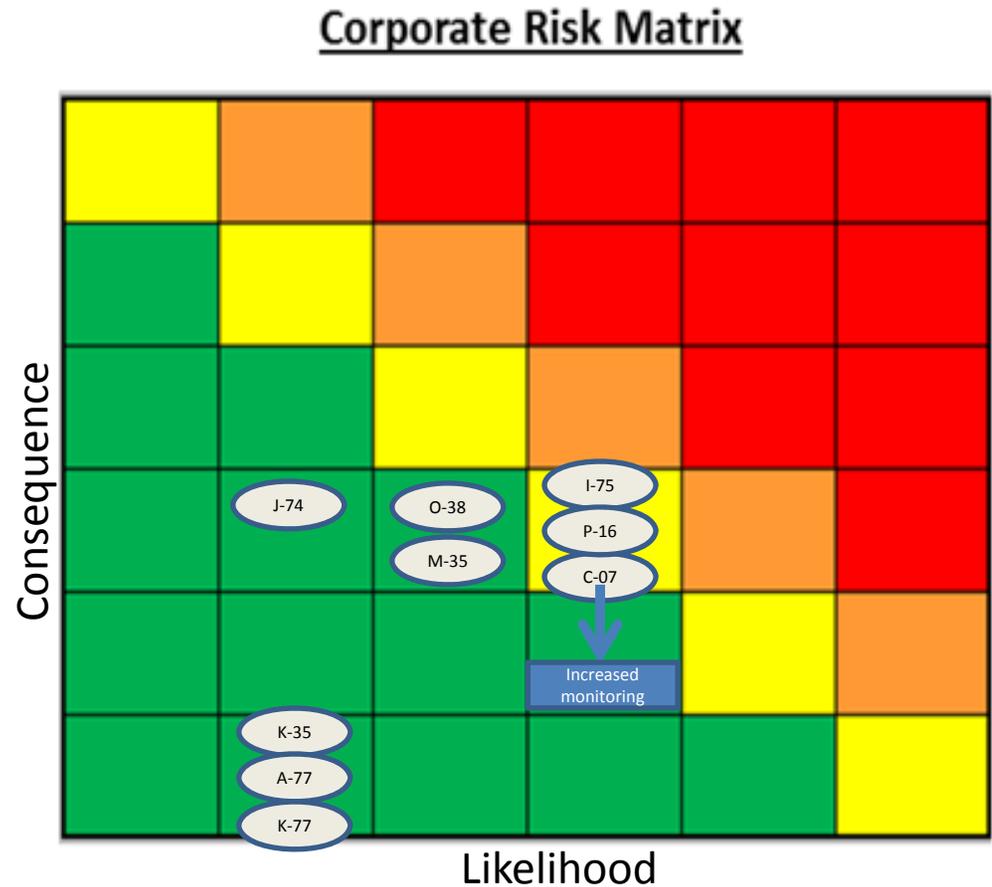
Acceptable Risk non-compliance

Tolerable Risk non-compliance

# SUMMARY OF RISK ASSESSMENTS

Risk related to well failure resulting in loss of containment and environmental damage or public safety

WELL	Risk Details
I-75	Increase inspection frequency
J-74	Acceptable Risk
P-16	Increase inspection frequency
O-38	Acceptable Risk
K-35	Acceptable Risk
A-77	Acceptable Risk
M-35	Acceptable Risk
C-07	Increase inspection frequency
K-77	Acceptable Risk



A detailed risk assessment, following CNRL's Corporate Risk Matrix, was conducted for each non-compliant well. This evaluation included a combination of likelihood of occurrence, and the potential consequence.

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