



Suite 2800, 421-7th Ave SW Calgary, Alberta, Canada T2P 4K9 [www.paramountres.com](http://www.paramountres.com)  
tel 403 290 3600

January 7th, 2019

OROGO  
Department of Industry, Tourism and Investment  
Government of the Northwest Territories  
P.O. Box 1320  
Yellowknife NT  
X1A 2L9  
Canada

**VIA EMAIL ONLY**

Attention: James Fulford,  
Chief Conservation Officer

**Information Request No. 2:**

**Paramount Resources Ltd. Application for an Operations Authorization for East Fort Liard Well Abandonments (OA-2018-004)**

Please find attached Paramount Resources Ltd.'s (Paramount) response to OROGO's information request (IR) dated December 17, 2018 as follows:

## **Emergency Response Plan**

### **2.1 Page Numbering Absent**

Request: Please provide an updated copy of the ERP that is easily referenced and includes appropriate page numbers and sub section numbers.

A revised Emergency Response Plan (ERP) to address OROGO's ERP IR 2.1, 2.2, 2.3 is attached.

### **2.2 Northwest Territories Petroleum Industry Release Reporting Requirements**

Request: Please update the ERP to ensure compliance with federal and territorial legislation that is applicable in the NWT.

A revised Emergency Response Plan (ERP) to address OROGO's ERP IR 2.1, 2.2, 2.3 is attached.

**2.3 Incident Reporting Criteria:**

Request: Please update the ERP to ensure compliance with territorial legislation and references to appropriate regulatory agencies.

A revised Emergency Response Plan (ERP) to address OROGO's ERP IR 2.1, 2.2, 2.3 is attached.

**2.4 Un-Redacted ERP**

Request: Please provide an un-redacted copy of the ERP.

Paramount's paper submission to OROGO of the Operations Authorization included an un-redacted copy of the ERP. A redacted and unredacted electronic version of the ERP is attached to this response.

**2.5 Working Alone**

Request: Please provide an updated ERP that includes a system that allows tracking of individuals that are working alone.

Paramount does not plan to have anyone working alone during the well abandonment project.

**2.6 Emergency Response Contractors**

Request: Please provide the Emergency Response Assistance Canada Plan for this operation for review and approval.

The Emergency Response Assistance Canada (ERAC) Plan is included as part of the ERP for liquified petroleum gas (LPG) or substances transported by rail. There is no plan to use LPG or transport substances by rail and as such, the ERAC plan is not included.

**Environmental Protection Plan****2.7 Abandonment Program Personnel Contact Information**

Request: Please provide an amended table, including names and contact information associated with each title, including names and contact information associated with each title currently listed.

Please find attached a revised Table 1: Abandonment Program – Personnel Contact Information with the names and contact information included in the EPP.

**2.8 Monitoring and Compliance**

Request: Please provide further detail on how the monitoring and compliance program is designed and executed to ensure that all aspects of the Environmental Protection Program are met.

Details of the monitoring and compliance of the EPP is described in A06-0 Appendix 6 of the Liard East OA application submission in Section 3.2 (page 25).

## Proposed Technical Program

### 2.9 Well Control

Request: Please provide:

- a) An overview of the processes involved in hazard identification and evaluation and management of associated risks for the proposed abandonment operations; and

The process involved in the hazard identification and controls are identified in the COR-HSE-PLN-002 Safety Plan NWT, Section 6: Hazard Identification and Control (pages 11-15) and a copy of the revised version will be provided when it is finalized.

- b) Additional details regarding the selection of a Class III 35MPa Blow-out Prevention and related systems for proposed abandonment operations.

Class III BOP consists of a set of pipe rams, blind rams and annular preventer to provide 3 levels of well control. In addition, the BOP operating procedure outlines the functionality and requirements for the BOP's. Installation, pressure testing, accumulator function test, and daily function test are specified in the operating program.

The first two details looked at for BOP selection is the flange ratings of the existing wellhead and the worst case potential bottom hole pressure.

For Bovie J-76 the existing wellhead rating is 35MPa and the worst case potential bottom hole pressure would be from the abandoned Slave Point zone at 30 MPa. In selecting Service Rig Blow out Preventers, the pressure rating of the preventers need to be equal to or greater than that of the production casing flange rating, or the formation pressure, whichever is lesser. Therefore, a Class III 35 MPa Blow-out Prevention system is programmed for Bovie J-76. (this BOP requirement is based on the AER Directive 37 Service Rig Inspection Manual).

For Celibeta No.2 H-78 the existing wellhead rating is 21 MPa and the worst case potential bottom hole pressure would be from the suspended Slave Point zone at 11 MPa. In this case a 21 MPa Blow-out Prevention system would be adequate. As both wells are planned for abandonment operations during the same season and the same Service Rig would be used, the 35 MPa system would be used. This would provide additional BOP safety assurance for the Celibeta well.

### 2.10 Safety Plan - Regulatory Framework

Request: Please provide an updated Safety Plan that:

- Correctly references relevant regulatory mandates and legislation related to the project scope and location; and
- Outlines the scope of work and requirements under the OGDPR and the Well Suspension and Abandonment Guidelines and Interpretation Notes.

The Safety Plan is being updated to address the OROGO IR in Section 2.10 and will be provided when it is finalized.

**2.11 Safety Plan - Project Specific Information**

Request: Paramount is required to provide updates to the safety plan that satisfy the requirements of Section 8 c), e) and f) of the OGDPR including provision of:

- a) The Site-Specific Information as referenced in Appendix 2 of the Safety Plan; and
- b) A completed Project Risk Register as referenced in Appendix 3 of the Safety Plan.

The Safety Plan is being updated to address the OROGO IR in Section 2.11 and will be provided when it is finalized.

**2.12 Safety Plan - Emergency Transportation Plan**

Request: Please provide a Site-Specific Emergency Transportation Plan and Emergency Contact List as referenced in Section 7 of the Safety Plan.

The site-specific emergency transportation plan and contact list is included in the updated Safety Plan and will be provided when it is finalized.

Should you require additional information regarding this application and project please contact me.

Regards,



John Hawkins, P. Eng.  
Director Asset Management  
Paramount Resources Ltd.  
403-817-5074