

Ken Nikiforuk
Manager, Completions
Strategic Oil and Gas Ltd.
1100, 645 – 7TH AVENUE SW
CALGARY AB T2P 4G8

December 18, 2018

Dear Ken Nikiforuk:

**Information Request No. 1:
Strategic Oil and Gas Ltd. Application to
Re-Suspend the Cameron 2M-73 Well (WID 2026) (ACW-2018-007)**

On December 11, 2018, the Office of the Regulator of Oil and Gas Operations (OROGO) received a complete application from Strategic Oil and Gas Ltd. (SOG) to Alter the Condition of a Well (ACW) for the re-suspension of the Cameron 2M-73 well. In order to review SOG's application, OROGO requires additional information, as set out in the attached Information Request No. 1.

Please send your written responses and any associated correspondence to Mr. James Fulford, Chief Conservation Officer, OROGO, by email at oro.go@gov.nt.ca or through OROGO's secure file transfer site.

Please submit your response on or before 4:00 p.m. on January 14, 2019. If you are unable to respond within this timeframe or have any questions, please contact me at (867)767-9097 Ext: 78003 or by email at Pauline.dejong@gov.nt.ca.

Sincerely,



Pauline de Jong
Senior Advisor, Legislation and Policy

Attachment

c. Michael Bolianatz, Regulatory Compliance Officer, Strategic Oil and Gas Ltd.

Strategic Oil and Gas Ltd. (SOG)
Application to Alter the Condition of a Well (ACW-2018-007)
Information Request No. 1

1.1 Abandonment of Perforated Zones

Preamble: The ACW application for the Cameron 2M-73 well proposes the use of a "One step Abandonment Procedure", whereby cement is be poured down the tubing to place 15 linear metres of cement on top of permanent bridge plugs.

This proposed methodology does not meet the well abandonment standards set out in Section 6 of OROGO's *Well Suspension and Abandonment Guidelines and Interpretation Notes (Guidelines)* which requires the use of circulated cement to abandon perforated zones.

Request: Please submit an updated well program that meets the well abandonment standards set out in Section 6 of the Guidelines, which requires the use of circulated cement to abandon perforated zones.

1.2 Detailed Description of Procedure

Preamble: The information provided in the Procedure section of the ACW application does not provide sufficient detail to meet the requirements of section 12a) of the *Oil and Gas Drilling and Production Regulations (OGDPR)*. The well operations plan is required to describe all steps in the well abandonment and or suspension process in sufficient detail to assess the safety, regulatory compliance and technical proficiency of proposed operations.

Areas where the information provided is not sufficient include (but are not limited to):

- Determination of SCVF/Gas Migration. For example, bubble test procedure, ensuring the well is not frozen, monitoring for LEL, potential H₂S levels, evidence of gas migration at surface (i.e. historical inspection records) and identification and repair of possible vent flows;
- Steps to ensure that the well is dead by conducting and recording SICP and SITP. Determination of weight and composition of required kill fluid that will be on location.
- Procedures for conducting the wellhead to BOP connection (i.e. install landing pup joint with an open stabbing valve);
- Pressure tests to be conducted and recorded (i.e. wellhead to BOP connection, the circulating pressure lines, rig manifold and BOP pressure tests);

- Accumulator function test procedures, including accumulator recharge and closing times for each of the BOP components;
- Conducting and recording blowout prevention and safety drills;
- Ensuring all necessary safety equipment is strategically positioned on site and tested to ensure proper operating condition prior to commencing well abandonment or suspension operations; and
- Install and secure the wellhead at the end of operations for zonal abandonments and suspensions.

Request: Please provide an amended ACW application that meets the requirements of section 12a) of the OGDPR by providing sufficient detail on the planned procedures.

1.3 Well Suspension Requirements

Preamble: The ACW application for the Cameron 2M-73 well does not meet the requirements of Section 5B of the Guidelines, which requires a suspended wellbore to be filled with corrosion-inhibiting fluid and the use of non-freezing liquid within the permafrost zone.

Request: Please submit an updated well program that meets the requirements of Section 5B of the Guidelines, which requires a suspended wellbore to be filled with corrosion-inhibiting fluid and the use of non-freezing liquid within the permafrost zone.

1.4 Clarification of Planned Suspension and Abandonment Activities

Preamble: The ACW application for the Cameron 2M-73 well proposes to leave the well in a suspended state.

Section 12c) of the OGDPR requires that an application to suspend a well, or part of a well, include an indication of the period within which the suspended well will be abandoned or completed.

Request: Please provide an amended ACW application that meets the requirements of section 12c) of the OGDPR by indicating the period within which the suspended well will be abandoned or completed.

If SOG does not plan to eventually abandon the well, please provide a rationale for the use of circulated cement plugs for zonal isolation versus the use of down-hole suspension techniques as described in Section 5B of the Guidelines.