

February 6, 2019

Enforcement File: 2017-096

Petronas Energy Canada Ltd. Calgary City Centre 1600 215 Second St SW Calgary, AB T2P 1M4

Attention: Mr. Glen Swanson, Manager, Regulatory and Operational Compliance

Re: General Order 2017-096

Dear Mr. Swanson

On September 13, 2017, the BC Oil and Gas Commission (Commission) issued General Order 2017-096 to Progress Energy Canada Ltd (Progress). On November 21, 2018 Progress changed their company name to Petronas Energy Canada Ltd (Petronas).

Petronas has satisfied all the requirements of the Order.

Please be advised that pursuant to section 49(8) of the *Oil and Gas Activities Act*, General Order 2017-096 is hereby terminated.

If you have any questions or concerns, please do not hesitate to contact the Commission.

Sincerely,

Patrick Smook Director, Compliance & Enforcement BC Oil and Gas Commission



GENERAL ORDER 2017-096

Section 49 Oil and Gas Activities Act

Issued to:

Progress Energy Canada Ltd. 500, 140 10th Avenue SE Calgary AB T2G 0R1

Attention: Mr. Glen Swanson, Manager, Regulatory and Operational Compliance

Order:

Pursuant to section 49(b) of the *Oil and Gas Activities Act* (the Act), I, Jacques Corstanje, order that Progress Energy Canada Ltd. (Progress):

1. By September 15, 2017, continuously maintain the water level in the freshwater storage structure located at b-09-G/94-G-02 (the Structure) to a maximum of 50% of the design live storage of the Structure.

Conditions:

A. The Order and this amendment shall remain in effect until amended or terminated by the Commission.

Reasons:

- i. Progress is the permit holder of the Structure.
- ii. The Structure is a dam under the *Water Sustainability Act*.
- iii. During a field assessment conducted on May 16, 2017, the Commission's Water Manager, Allan Chapman, MSc, PGeo, Dam Safety Officer, Justin Anderson, Operations Officer, Ken McLean and FLNRO Senior Dam Safety Officer, Monty Miedrich, observed features that create a concern about the integrity and stability of the Structure, namely:
 - a. Water was over-topping the Structure;
 - b. Erosion and slumping was occurring at locations on the Structure where water was over-topping; and
 - c. The Structure does not possess a surface spillway or outlet.
- iv. On May 23, 2017 the Commission issued Order 2017-028.

- v. On June 2, 2017, the Commission inspected the site verifying that water volumes in the Structure had been reduced to at least 1.5 metres below the lowest elevation from the top of the Structure, in compliance with items 1 and 2 of Order 2017-028.
- vi. On July 26, 2017 the Structure was inspected by the Commission's Dam Safety and Integrity Engineer, Kevin Fattah, M. Eng, M. Sc., P.Eng., who observed features that created a concern for the integrity and stability of the Structure, namely the following:
 - a. Five locations of seepage were observed on the Structure at time of inspection. Evidence of previous seepage was also observed from periods when water levels in the Structure were near maximum capacity. Continuous seepage may cause piping or other Structure failures.
 - b. A single outflow culvert is situated higher than required to maintain a safe freeboard for the Structure and is of inadequate size to maintain safe freeboard during peak inflows.
 - c. Retention of rainwater on the Structure's crest due to flat profile and vehicle ruts may cause saturation of the Structure's crest, resulting in damage and breaching failure.
 - d. High vegetation cover present on the crest and downstream sides of the Structure prevents clear monitoring of the Structure.
 - e. An erosion gully was observed on the Structure's slope.
- vii. The Commission's Dam Safety and Integrity Engineer has recommended reducing water level in the Structure to 50% or less of the design live storage to mitigate risks of failure.
- viii. On September 11, 2017, Progress advised the Commission that it had taken steps to further reduce water levels in the Structure.
- ix. On September 13, 2017 the Commission terminated Order 2017-028.
- x. Based on the July 26th, 2017 inspection and recommendations by the Commission's Dam Safety and Integrity Engineer, I am of the opinion that maintaining water levels in the Structure higher than 50% of the design live storage creates a potential for Structure failure.
- xi. I am of the opinion that this order is required for protection of the environment and to mitigate risk to public safety.

Review and Appeal

Progress may request a review of this order under section 70 of the Act by submitting a request for review to: <u>ogc.determinationreviews@bcogc.ca</u>.

Progress may appeal this order to the Oil and Gas Appeal Tribunal under section 72 of the Act. The process for appeals may be found at <u>www.ogat.gov.bc.ca</u> and a notice of appeal may be sent to the Oil and Gas Appeal Tribunal at:

Oil and Gas Appeal Tribunal PO Box 4925 Stn Prov Govt Victoria, BC V8W 9V1

Jacques Corstanje, RPF Director, Aboriginal Liaison Program BC Oil and Gas Commission

DATED AT <u>Fort St. John</u>, in the Province of British Columbia, this 13th day of September, <u>2017</u>.