

ORDER & REQUEST Section 38 Oil and Gas Activities Act

Issued to:

Tourmaline Oil Corp. 3700, 250- 6th Avenue SW Calgary, AB T2P 3H7

Attention: Mr. Colin Frostad

Order:

Pursuant to section 38(1)(c) of the Oil and Gas Activities Act (the Act), I, Andy Johnson, order that:

- 1. On or before October 26, 2020 Tourmaline Oil Corp. (Tourmaline) must complete a Post Event Report for:
 - TOURMALINE HZ SUNRISE A09-34-079-16 (WA37897),
 - TOURMALINE HZ SUNRISE C09-34-079-16 (WA37899),
 - TOURMALINE HZ SUNRISE D09-34-079-16 (WA37900),
 - TOURMALINE HZ SUNRISE F09-34-079-16 (WA37902),
 - TOURMALINE HZ SUNRISE 09-34-079-16 (WA37896),
 - TOURMALINE HZ SUNRISE B09-34-079-16 (WA37898), and
 - TOURMALINE HZ SUNRISE E09-34-079-16 (WA37901).
- 2. The Post Event Report must:
 - a. Provide a summary of events associated with hydraulic fracturing from September 9, 2020 to September 24, 2020, including a written summary of all events over magnitude 2.0 M_L and any additional events which are known to have been felt;
 - b. Explain what steps Tourmaline has taken since September 9, 2020 to inform residents within 3.5km of the subject wells about the events referenced in 2(a), and advise residents about what steps will be taken to monitor and mitigate all effects associated with these events as well as the probability of future events; and
 - c. Show that the affected residents were given information about how to contact Tourmaline to provide comments on the events referenced in 2(a) as well as on Tourmaline's response including the effectiveness of mitigation.

- 3. On or before resuming fracturing activities at:
 - TOURMALINE HZ SUNRISE 09-34-079-16 (WA37896),
 - TOURMALINE HZ SUNRISE B09-34-079-16 (WA37898), and
 - TOURMALINE HZ SUNRISE E09-34-079-16 (WA37901),
 - (the "subject wells"),

Tourmaline must prepare and maintain an updated Seismic Monitoring and Mitigation Plan.

- 4. The updated Seismic Monitoring and Mitigation Plan must:
 - a. Include a Community Engagement Strategy targeting residents within 3.5km of the subject wells as well as those known to have reported felt events from completion operations in September 2020;
 - b. Provide for immediate suspension of fracturing activities at the subject wells after any seismic event over magnitude 2.7 M_L, subject to a review of the event(s) and submission and approval by the Commission of a revised mitigation plan; and
 - c. Provide for an immediate pause of fracturing activities at the subject well deemed by the Commission to have caused the event(s) after any seismic event over magnitude 2.2 M_L but less than or equal to magnitude 2.7 M_L , and for resumption of fracturing activities on the subject well may occur after a period of at least 12 hours has elapsed without subsequent seismic events greater than magnitude 2.2 M_L associated with the same subject well.
- 5. The Community Engagement Strategy must:
 - a. Provide residents with a summary of the Post Event Report required under Condition 1;
 - b. Explain what steps Tourmaline will be taking to monitor and mitigate all effects associated with future events; and
 - c. Provide an opportunity for residents to submit comments on the Seismic Monitoring and Mitigation Plan.
- 6. Tourmaline must maintain records of:
 - a. Information provided to residents and responses received, as described in 2 and 5; and
 - b. All seismic events equal to or greater than magnitude 1.5 M_{L}

Request:

Pursuant to section 38(1)(e) of the Act, the Commission requests that Tourmaline submit Post Event Report electronically to <u>C&E@bcogc.ca</u> on or before October 26, 2020.

Pursuant to section 38(1)(e) of the Act, the Commission requests that Tourmaline submit the updated Seismic Monitoring and Mitigation Plan, including the Community Engagement Strategy, electronically to <u>C&E@bcogc.ca</u> at least 60 days in advance of further fracturing activities at the subject wells.

Conditions:

This Order shall remain in effect until:

- I. All directives identified on this order have been completed as required, or
- II. Amended or terminated by the Commission.

Andy Johnson

Andy Johnson Vice President, Operations BC Oil and Gas Commission

DATED AT Fort St. John, in the Province of British Columbia, this 24th day of September 2020