

file no. 19096

**FORESTS ACT**

**BEING CHAPTER F-22 R.S.A. 2000 (the "Act")**

**Amendment #5 to**

Director's Order 2013/01 - UAR

West Fraser Mills Ltd.  
Suite 501, 858 Beatty Street  
Vancouver, British Columbia  
V6B 1C1

WHEREAS on October 7, 2013, the Director issued to Gordon Buchanan Enterprises Ltd. (the "Company") Director's Order 2013/01-UAR (the "Order"), which required the Company to remedy the effects of the failure of the Roads into the Block 1559 at SW22-69-13-W5M [the "Site"] under the Timber Licence;

WHEREAS on October 17, 2013, in response to a request from the Company, the Director issued Amendment #1 to the Order, which amended the completion date for the remedial work to be completed from January 31, 2014 to July 31, 2014;

WHEREAS on October 31, 2013, the Director received from the Company's the Geotechnical and Slope Stability Impact Assessment and Reclamation and Revegetation Plan (the "Proposed Plan"), which plan included Appendices A-D, inclusive;

WHEREAS on March 19, 2014, the Director issued to Gordon Buchanan Enterprises Ltd. Amendment #2 to the Order, which required the implementation of some remedial, inspection and reporting measures related to the Site;

WHEREAS on April 3, 2014 Environment and Sustainable Resource Development (ESRD) received a letter from West Fraser Mills Ltd. advising that West Fraser Mills Ltd. had purchased various assets and timer disposition interests of Gordon Buchanan Enterprises Ltd., and that West Fraser Mills Ltd. would also resolve any of Gordon Buchanan Enterprises Ltd.'s non-compliances with the *Forests Act* and its related regulations;

WHEREAS the Director met with a West Fraser Mills Ltd. on April 7, 2014, at which meeting West Fraser Mills Ltd. stated its commitment to carrying out the requirements of the Order, as amended;

WHEREAS on April 11, 2014, the Director issued to West Fraser Mills Ltd. Amendment #3 to the Order, which required West Fraser Mills Ltd. to carry out the requirements of the Order, as amended;

WHEREAS on April 14, 2014, representatives from ESRD and representatives from West Fraser Mills Ltd. visited the Site;

WHEREAS as a result of the observations made at the April 14, 2014 site visit, and consideration of the necessary remedial efforts, the Director issued to West Fraser Mills Ltd. Amendment #4 to the Order, which required West Fraser Mills Ltd. to submit a revised Geotechnical Assessment and a revised Remedial Plan.

WHEREAS on September 12, 2014, West Fraser Mills Ltd.'s consultant submitted to the Director the Revised Geotechnical Assessment Report.

WHEREAS on October 15, 2014, the Director met with West Fraser Mills Ltd. to discuss the contents of the Revised Geotechnical Assessment Report and the remedial work that is to take place on the Site;

WHEREAS Faye Hutchings, Compliance Manager, Upper Athabasca Region, has been designated a Director for the purposes of issuing orders under the *Forests Act* (the "Director");

WHEREAS the Director is of the opinion that a further amendment to the Order is needed to clarify the remaining requirements of the Revised Geotechnical Assessment Report and the Remedial Report.

**THEREFORE, I, Faye Hutchings, pursuant to section 12 of the *Forests Act*, DO HEREBY ORDER:**

**Geotechnical Assessment**

1. West Fraser Mills Ltd. shall by **December 1, 2014**, submit to the Director, for the Director's approval, a written Revised Geotechnical Assessment Report #2, signed by an independent third party qualified professional currently registered with the APEGA.
2. In the Revised Geotechnical Assessment Report #2, West Fraser Mills Ltd. shall include, at minimum, all of the following:
  - a. Identification of potential geohazards within the Site including, but not limited to, identification of areas within the Site that are damaged or vulnerable as a result of slope angle, alterations to drainage patterns or lack of adequate vegetation;
  - b. A topographic survey of the entire Site, using
    - i. available Light Detection And Ranging technology
    - ii. a post-slide site survey, and
    - iii. GPS points of the slide area on the Site.

- c. The topographic survey of the Site described in Clause 2(b) shall include, but is not limited to, identification and description of each of the following:
  - i. Surface water and groundwater sources that could impact the Site;
  - ii. The flow of surface water from upland sources and moving across and through the Site;
  - iii. Slopes on the Site;
  - iv. The Watercourse adjacent to the Site;
  - v. Escarpment on the Site;
  - vi. Location of tension cracks on and adjacent to the Site and
  - vii. Toe bulging on and adjacent to the Site.
- d. A vegetation survey, including descriptions of the vegetation on the Site both pre-disturbance and post-disturbance;
- e. A detailed assessment of each of the existing erosion and sediment control devices, including but not limited to:
  - i. An assessment of the limitations, performance and suitability to prevent erosion of and sediment migration off the Site of each of the existing sediment ponds identified pursuant to Clause 3 of Amendment #4;
  - ii. An assessment of the limitations, performance and suitability to prevent erosion of and sediment migration off the Site of each of the existing silt fences identified pursuant to Clause 3 of Amendment #4
- f. Using the Revised Universal Soil Loss Equation - For Application in Canada (RUSLE-FAC), a completed calculation of soil loss equivalency for the entire Site.
- g. A detailed description of all site visits conducted in the preparation of the Revised Geotechnical Assessment;

### Remedial Plan

3. West Fraser Mills Ltd. shall, by **December 15, 2014** submit to the Director, for the Director's approval, a written Remedial Plan, signed by an independent third party qualified professional currently registered with the Association of Professional Engineers and Geoscientists of Alberta (APEGA) or a Certified Professional Erosion and Sediment Control specialist (CPESC).
4. In the Remedial Plan, West Fraser Mills Ltd. shall include at minimum, all of the following:

- a. A description of all mitigation work required to prevent erosion and prevent sediment run-off from the Site, including but not limited to;
- i. Description of all proposed replacement location(s) for any existing sediment ponds determined under Clause 2(e)(i) herein to be unsuitable for prevention of erosion and sediment migration from the Site;
  - ii. Description of all proposed replacement location(s) for any existing silt fences determined under Clause 2(e)(i) herein to be unsuitable for prevention of erosion and sediment migration from the Site;
  - iii. A description of all plans for the
    1. Installation; and
    2. Long-term use of all
      - A. Sediment ponds;
      - B. Silt fences; and
      - C. Bioengineering activities

to prevent further sediment migration from the Site; and
  - iv. Description of proposed location(s) and size(s) of additional sediment ponds, silt fences, and bioengineering activities identified under Clause 4(a)(iii) herein.
- b. A plan to stabilize all of the materials on the bed and shore of the Watercourse, including but not limited to the use of all of the following:
- i. Live planting using exclusively native species;
  - ii. Fascines; and
  - iii. Wattles; or
  - iv. Other bioengineering methods as approved in writing by the Director.
- c. A plan to stabilize all of the materials on the area adjacent to and upland of the Watercourse to prevent erosion;
- d. A Site Drainage Plan, including but not limited to all of the following:
- i. Flow paths from all sources, including
    1. from the plateau above the Watercourse;
    2. entering and exiting the slide area;
    3. entering and exiting the sediment ponds;
    4. across the flood plain and shore;
    5. to the Watercourse
  - ii. Locations of all silt fences; and
  - iii. Locations of all drainage control structures;

- e. A ground surface stabilization plan, including but not limited to all of the following:
  - i. Location of erosion control mats;
  - ii. Hand seeding areas, including type of seed mix proposed; and
  - iii. Mulching areas including type and source of mulching; and
- f. A schedule of implementation for the Remedial Plan, including, a completion date of no later than **July 4, 2015**.
- g. A proposed Operations Plan, including but not limited to, West Fraser Mills Ltd.'s plan to:
  - i. Inspect; and
  - ii. Maintain

the remedial activities implemented in accordance with this Order.

- 5. West Fraser Mills Ltd. shall implement the Remedial Plan in accordance with the written approval from the Director.
- 6. The requirements of Clauses 12, 13, 14, 15 of Amendment #4 are hereby suspended only from November 1, 2014 – March 31, 2015.
- 7. Clauses 8, 9, 10 and 11 of Amendment #4 to the Director's Order 2013/01 - UAR are hereby deleted, cancelled or repealed, as the case may be.
- 8. Clauses 1 - 7, inclusive, of Amendment #4 to the Director's Order remain in force.

DATED at the city of Spruce Grove in the Province of Alberta, this  
17 day of October, 2014.

**Original Signed by: Faye Hutchings  
Compliance Manager  
Upper Athabasca Region**

**Notwithstanding the above requirements, the Company shall obtain all necessary approvals in complying with this order.**

**Take notice that this order is a remedial tool only, and in no way precludes any enforcement proceedings being taken regarding this matter under this Act or any other legislation.**