



Ministry of Forests
and Range

FFT Tea Bag Fertilization Standard

Effective October 15, 2006

CONTENTS

1.0 Standards of performance for tea bag Fertilization	1	7.0 Inspection System & Payment Calculation	2
2.0 Worker Safety	1	7.0 Untreated Areas	3
3.0 Environmental Safety	1		
4.0 Other Requirements	2		
5.0 Inspection	2		
6.0 Determination of Satisfactory Treatment	2		

1.0 STANDARDS OF PERFORMANCE FOR TEA BAG FERTILIZATION

- 1.1 The instructions for use provided by the manufacturer are to be followed.
- 1.2 The fertilizer tea bag has to be buried on the uphill side of the stem and, if there is no uphill side, on roughly the north side of the stem.

2.0 WORKER SAFETY

- 2.1 The required safety equipment for all persons engaged in this work shall be provided at the Recipient's expense.
- 2.2 To minimize health risks associated with handling fertilizer, the following precautions have to be taken.
 - (a) Use gloves to handle the fertilizer and tea bags
 - (b) Change or wash gloves regularly to avoid residue build-up
 - (c) Wash hands before handling food, drinking or smoking

3.0 ENVIRONMENTAL SAFETY

- 3.1 The Recipient will store, load and apply the fertilizer in accordance with the laws and regulations of Canada and British Columbia.
- 3.2 The Recipient is responsible for the safe and secure transport of the fertilizer in the Recipient's possession.
- 3.3 The Recipient shall provide a means of securing the fertilizer at the work site or loading site to prevent unauthorized access to the fertilizer.
- 3.4 The loading of fertilizer into the dispensing equipment shall be done at a designated location, such that any spilled fertilizer shall not enter any water source or other non-target area.
- 3.5 The Recipient must have on site at all times:
 - (a) A copy of these standards
 - (b) Treatment area(s) map(s)

- (c) The Material Safety Data Sheet (MSDS) of the fertilizer being applied
- The Material Safety Data Sheet (MSDS) of the fertilizer being applied
- 3.6 The Recipient shall carefully note all buffer zones marked on the map(s) and shall notify the Administrator immediately, if areas outside of the designated treatment areas were treated.
- 3.7 Any spills of fertilizer are the responsibility of the Recipient and shall be cleaned up the same day and disposed of in accordance with provincial laws and regulations prior to the resumption of fertilizer application.
- 3.8 Tanks, buckets and other dispensing equipment shall not be washed in or near streams, rivers or lakes.

4.0 OTHER REQUIREMENTS

- 4.1 The Recipient shall arrange for the supply of the fertilizer.
- 4.2 The Recipient shall be responsible for the cost of the entire transport of the fertilizer to the work site.
- 4.3 The obligation of the Recipient under these standards is not fulfilled until the proper disposal of all waste materials has been completed.

5.0 INSPECTION

- 5.1 The Recipient shall:
- (a) engage an Inspector to inspect the Work (the "Inspector") who is
 - i. the Registered Professional Forester (RPF), or operates under the direction of the RPF, who will sign and professionally seal reports for the Work,
 - ii. experienced and competent in conducting inspections of fertilization operations,
 - iii. familiar with the approved Plans and Work Plans for the Work Areas, and not engaged in the direct conduct of the fertilization;
 - (b) inspect the Work in a timely manner to ensure all Work is performed as Specified; and
 - (c) inspect all Work Areas in accordance with the Inspection System below.
- 5.2 The Inspector may be an employee of the Recipient. For clarity of function, however, this schedule treats the Inspector and the Recipient as two separate entities.
- 5.3 For GPS traverses done in the dynamic linear mode, at least 95 % of the individual GPS position fixes shall be within 10 metres (horizontal measurement perpendicular to the line) from the true position of the line.
- 5.4 The Inspector shall mark quality inspection plots in the field and record them on a survey map such that the Province can locate the plots for a period of up to three months after their establishment or until they may be covered for an extended period by snow, whichever is sooner.

6.0 DETERMINATION OF SATISFACTORY TREATMENT

- 6.1 A treatment unit may be considered satisfactorily treated when:
- (a) the average performance quality of all plots is 85% or higher
 - (b) unless otherwise specified, there are no contiguous areas greater than one tenth (1/10) hectare that do not meet the performance quality requirements.

7.0 INSPECTION SYSTEM & PAYMENT CALCULATION

- 6.1 Inspection plots have to be established according to random sampling principles and according to a predetermined grid.
- 6.2 Plots have to be 100 m² (1/100 ha - 5.64 m radius) in size.

6.3 Not more than 15 plots are required per payment unit.

6.4 On smaller payment units up to 5 plots per hectare should be established.

6.5 Performance Quality % (PQ%) is to be calculated as

$$(a) \text{ PQ\%} = (\text{satisfactorily fertilized trees} \times 100) / (\text{trees required to be fertilized})$$

6.6 Payment % is to be calculated as

$$(a) \text{ Payment \%} = (\text{PQ\%} \times 1.08) - ([100 - (\text{PQ\%} \times 1.08)]^2) / 8$$

6.7 Where the Recipient has failed to store or handle the fertilizer in the manner specified herein or has by any other means created a safety or environmental hazard, a reduction of payment of up to \$1,000 per occurrence may be effected.

7.0 UNTREATED AREAS

7.1 If the Recipient fails to treat any area(s) which the Inspector considers treatable, and if the Recipient is unwilling or unable to treat the area(s), then the Province, or on its behalf the Administrator, may reduce the basic payment by an amount equal to the Province's or Administrator's estimate of having another Recipient complete the Work.