Province of British Columbia
OFFICE OF THE MINISTER

Ministry of Forests

MEMORANDUM

File: 195-30/IAPP

March 23, 1998

To: Regional Managers

From: The Honourable David Zirnhelt
Minister of Forests

I hereby approve Amendment No. 4 to the *Interior Appraisal Manual*, and attach a copy of it for your use. The following sections are amended:

Section 2.5.1	Reword for gender neutrality.
Section 4.4.3	Clarify an inconsistency of application for the region controlled constant used in the equation for ground skidding.
Section 4.7	Reword for gender neutrality.

This amendment will come into force on May 1, 1998. Amendments or revisions to this manual require my further approval.

David Zirnhelt
Minister

Attachment

pc: Bill Howard, Director, Revenue Branch

All Subscribers, *Interior Appraisal Manual*

Printed on Recycled Paper

BRITISH COLUMBIA Ministry of Forests

MANUAL REVISION TRANSMITTAL

FOR FURTHER INFORMATION CONTACT:

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MANUAL TITLE
Interior Appraisal Manual

REVISION No. 4	**ISSUE DATE** April 1, 1998

MANUAL CO-ORDINATOR
Judy Laton
Revenue Branch

AUTHORIZATION (Name, Title)
W. Howard
Director, Revenue Branch

Please make the following changes to your copy of the above Ministry manual. Please insert the following specified pages and **file this notice** immediately after the Amendments Tab.

ACTION (Remove/Insert)	(VOL.) CHAPTER-SECTION-SUBJECT TABLE OF CONTENTS	PAGE(S)	COMMENTS
REMOVE	Chapter 2	13 - 14	
INSERT	Chapter 2	13 - 14	
REMOVE	Chapter 4	31 - 32	
INSERT	Chapter 4	31 - 32	
REMOVE	Chapter 4	45 - 46	
INSERT	Chapter 4	45 - 46	

2.5.1 Method of Transportation to be Used in Determining Point of Appraisal

The appraiser must base the estimate of transportation costs on the method of transportation which will produce the least total harvesting and delivery cost estimate for the cutting authority area, unless that particular method of transportation is not possible under the cutting authority. In considering whether or not a particular method of transportation is possible under the cutting authority, the appraiser must not have regard for:

1. Any destination referred to in the cutting authority.
2. Any document other than the cutting authority.

2.6 Calculation Conventions

All operating cost calculations are performed to the full capacity of the calculating machine with the results truncated at four places of decimals and rounded to two places.

Results from 5 to 9 are rounded upward and from 1 to 4 are rounded downward.

After each phase cost estimate ($/m^3) (see Chapter 4) has been rounded to the nearest cent it is summed with other estimates to obtain the total cost estimate.

Where values are specified as limits (constraints or requirements for equations), they are treated as absolute values and actual measurements or records are not rounded before use unless otherwise specified.

Stumpage rate calculations are performed according to the methods specified in the document entitled, *Specification: Calculating Stumpage Rates for Interior Appraisals*, approved by the Director, Revenue Branch.

4.4.3 Tree-to-Truck Cost Estimate

Tree-to-Truck costs estimates are determined for each harvesting method as follows:

1. Helicopter Logging

   Only partial cut and clear-cut logging variables are recognized. The cost estimates are applied to the volume of timber which is required to be logged by helicopter.

   Two variations are recognized:

   a. Clear Cut $/m^3 = 65.29

      Clear Cut is defined as volume removal of 90 percent or greater of the total net cruise volume.

   b. Partial Cut $/m^3 = 79.22

      Partial cut is defined as volume removal of less than 90 percent (see Section 4.4.2 (5)) of the total net cruise volume.

2. Horse Logging

   No variables are recognized for this method. The cost estimates are applied to the volume of timber to be clear cut or partial cut, which the logging plan requires to be skidded by horse(s).

   $$\$/m^3 = 28.95$$

3. Ground Skidding

   The ground skidding equipment options include, but are not limited to, rubber tired skidder, crawler tractor, soft track skidder, small cat skidding, hoe chucking, long line skidding, clambunk forwarders, low ground pressure skidders, harvester forwarders and cut to length processors. A system does not have to skid wood all the way from the stump to the landing to be included. Some wood may be moved part way by longlining or hoechucking before being skidded by some other system to the landing.

   Two variations are recognized:

   a. Clear Cut

      Clear Cut is defined as the removal of 90 percent to 100 percent of the total net cruise volume.

b. Partial Cut (PCUT)

Partial cut is defined as the removal of less than 90 percent (see Section 4.4.2 (5)) of the total net cruise volume.

When the volume per tree is less than 0.20 m^3, a cost additive will apply to the Ground Skidding Tree-to-Truck cost estimates in all Forest Regions. The cost additive is determined as follows:

$$\$/m^3 = 3.75 - 17.60 * VOLTREE$$

The tree-to-truck cost estimate is determined from the equation as follows:

$$\$/m^3 = CONSTANT + 7.02 * SLOPE\%/100 - 6.57 * VOLHA/1000 + 4.85 * BD\%/100 + 6.67 * DPCUT - 6.63 * PCUT/100 + 1.16 *(DS-50)/100$$

Where CONSTANT =

	Biogeoclimatic Zone			
Region	CWH/MH	ICH	ESSF	All Other
Nelson	21.14	20.22	21.11	18.82
Prince George (Excludes FNP)	18.41	17.49	18.38	16.09
All Other (Includes FNP)	19.05	18.13	19.02	16.73

For the above equation the following definitions apply:

- if DS is less than or equal to 50 km, then (DS-50) = 0,
- if DS is greater than 150 km, then (DS-50) = 100,
- if BD % is less than or equal to 15, then BD % = 0,
- GVOL = gross volume per tree (m^3) computed as VOLTREE / (1-DEFECT % / 100),
- DPCUT = 1 if partial cut percent is greater than 0 and less than 90 otherwise DPCUT = 0,
- PCUT = percent volume removed in a partial cut (EXCEPT: if partial cut percent>=90% then, PCUT=0), and
- FNP = Fort Nelson, Peace River area consisting of the Fort Nelson, Fort St. John and Dawson Creek Forest Districts.

Region	TFL #	TSA	TSA #	Supply Block	$/m3
Cariboo		Quesnel	26	A, B, C, D	0.53
		Quesnel	26	E, F, G, H, I	1.22
		Williams Lake	29	A, B, C, D, E, I	0.73
		Williams Lake	29	F, G, H, J,	1.30
		Williams Lake	29	K, L	1.09
		Williams Lake	29	M, N	1.51
		100 Mile House	23	All	1.42
	5				0.53
	52				1.22

4.7 Road and Land Use Charges

Prior to a road or land use charge being included in an appraisal , the licensee must:

a. submit a "Request for Approval of a Road Use Charge" form with the data sheet; and

b. receive written approval of the road or land use charge from the Regional Manager.

1. Charges as a Share of Road Maintenance

   No recognition is made of such charges. The routine road maintenance cost estimate, Section 4.6, includes all relevant costs whether incurred directly by the licensee or by payment to another party for services performed.

2. Charges Other Than for Road Maintenance

   There are three main categories of road status:

   a. Forest Service Roads

      A road that is declared, determined, built, maintained or modified by the Ministry, as defined in forest legislation. No road use charges will be considered in appraisals,

   b. Permitted Roads

      Roads built on Crown land, authorized by road permit or other cutting authority documents. This category also includes foreshore leases, camp areas and dryland sorts. No road use charges will be considered in appraisals,

   c. Other Roads

      Road use charges for roads on Indian Reserves or on private land owned by an arm's length third party and not subject to a lease held by the licensee, an affiliate or an agent of either, may be considered in appraisals provided there is no lower cost route capable of development through Crown land.

      The charges recognized must be reasonable, must not exceed compensation that might be determined under forest legislation and must be proven through the presentation of auditable documents.

3. Other Land Use Charges

   Only non-governmental land use charges will be considered in appraisals.