

File: 280-20/195-30/IAPP

OCT 25 2001

To: Regional Managers - Interior

From: The Honourable Michael de Jong
Minister of Forests

Re: Amendment No. 2 to the *Interior Appraisal Manual*

I hereby approve Amendment No. 2 to the *Interior Appraisal Manual* and attach a copy for your use.

Section 2.2 has been revised to require the interior appraisal data submission to be signed and sealed by a registered professional forester.

The data submission has been amended to include a signature block for a registered professional forester.



This amendment will come into force on November 1, 2001. Further amendments or revisions to this manual require my approval.

A handwritten signature in black ink, appearing to read "M. de Jong".

Michael de Jong
Minister of Forests

Attachment

pc: Bill Howard, Director, Revenue Branch

All Subscribers, *Interior Appraisal Manual*



FOR FURTHER INFORMATION CONTACT:

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MANUAL TITLE Interior Appraisal Manual	
REVISION No. 2	ISSUE DATE November 1, 2001
PUBLICATIONS 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 – Appraisal Principles and Procedures	2-3, 2-4, 2-7, 2-8	
INSERT	Chapter 2 – Appraisal Principles and Procedures	2-3, 2-4, 2-7, 2-8	
REMOVE	Chapter 4 – Operating Cost Estimation	4-3, 4-4, 4-31, 4-32, 4-39, 4-40, 4-47, 4-48	
INSERT	Chapter 4 – Operating Cost Estimation	4-3, 4-4, 4-31, 4-32, 4-39, 4-40, 4-47, 4-48	Reference to Data Sheet replaced with Data Submission
REMOVE	Index	All	
INSERT	Index	All	Reference to Data Sheet replaced with Data Submission
REMOVE	Interior Appraisal Data Sheet	All	
INSERT	Interior Appraisal Data Submission	All	Reference to Data Sheet replaced with Data Submission
INSERT	Interior Appraisal Control Sheet	1	New sheet to accompany the Interior Appraisal Data Submission form.

2.2 Time Schedule - Appraisals and Reappraisals

Timeliness is an important factor in the stumpage appraisals and reappraisals. The procedures are as follows.

1. For each appraisal:
 - a. The licensee shall submit an Interior Appraisal Data Submission to the District Manager, and relevant supporting information requested by the District Manager. The Submission must be signed and sealed by a Professional Forester registered in the Province of British Columbia (the “professional forester”).
 - b. The District Manager may review the Submission and notify the professional forester, in writing, of any omissions, or provisions of the Interior Appraisal Manual that the professional forester may not have considered. The professional forester will consider the District Manager’s notification, and can revise the Submission.
 - c. The District Manager, if in agreement with the Submission, signs the Submission Control Sheet and forwards the Interior Appraisal Data Submission to the revenue section of the appropriate regional office.
2. For each reappraisal:
 - a. The licensee shall submit an Interior Appraisal Data Submission to the District Manager, and relevant supporting information requested by the District Manager. The Submission must be signed and sealed by a professional forester registered in the Province of British Columbia. The Submission must be received by the District Manager at least 45 calendar days prior to the anniversary date of the cutting authority.
 - b. The District Manager may review the Submission and notify the professional forester, in writing, of any omissions, or provisions of the *Interior Appraisal Manual* that the professional forester may not have considered. The professional forester will consider the District Manager’s notification, and can revise the Submission.
 - c. The District Manager, if in agreement with the Submission, signs the Submission Control Sheet and forwards the Interior Appraisal Data Submission to the revenue section of the appropriate regional office.

3. For each appraisal and reappraisal:
- a. Regional revenue staff may review the Submission and notify the professional forester and District Manager, in writing, of any omissions, or provisions of the *Interior Appraisal Manual* that may not have been considered. The professional forester will consider the notification, and may revise the Submission. The appraisal office will then determine or redetermine the stumpage rate.
 - b. Regional revenue staff will notify the licensee, in writing in the form of a stumpage advisory notice, of the stumpage rate and provide a summary of the information used to determine or redetermine the stumpage rate.
 - c. Within three (3) weeks of the date of the stumpage advisory notice, the licensee may notify regional revenue staff, in writing, of any objection to the information contained in the stumpage advisory notice that could be resolved without a review or appeal. The written objection must state the grounds for objection as well as a statement describing the relief requested. At this point, the objection is not considered a review or appeal under the *Forest Act* (Section 143 to 150).
 - d. Regional revenue staff will notify the licensee, in writing, if the objection referred to in Subsection c. above, cannot be resolved. In this notification, the regional revenue staff will indicate that the 3 week time requirement for notice for review specified in Section 144 (3) of the *Forest Act*, will commence upon receipt of that notification.

- ii. the untrended logging and silviculture cost estimates from the current appraisal will continue to be trended quarterly to determine stumpage rates.
 - c. Woodlot licence cutting authorities must be reappraised by the anniversary date.
 - d. A road permit must be reappraised by the effective date for a reappraisal of a road permit.
 - e. The effective date for a reappraisal under this section is:
 - i. the anniversary date for a cutting authority other than a road permit, and
 - ii. for a road permit, August 1, 2001 and June 1 of each year after 2001.
4. Mathematical Error
- a. If a government employee or contractor in the Ministry of Forests or a licensee (or employee or contractor of a licensee) becomes aware of what is or probably is a mathematical error in a stumpage determination, that person shall give written notice of the error ("the Notice") as follows:
 - i. in the case of appraisals and reappraisals, to the appropriate Regional Manager, and
 - ii. in the case of quarterly adjustments, to the Director of Revenue Branch,
 - b. the Notice shall describe the stumpage determination or determinations involved and shall describe the nature and cause of the error to the extent reasonably possible,
 - c. upon receipt of the Notice, the Regional Manager or the Director of Revenue Branch shall make the appropriate investigation to decide whether or not an error has, in fact, been made,
 - d. if the Regional Manager or the Director of Revenue Branch decides that an error has not been made, they shall notify the person who sent the Notice of the decision and the reasons for it,
 - e. if the Regional Manager or Director of Revenue Branch, decides that an error has been made, the following shall occur:
 - i. the Regional Manager or the Director of Revenue Branch, shall notify the person who sent the Notice of the decision and the reasons for it,
 - ii. the Regional Manager or the Director of Revenue Branch, shall take reasonable steps to ensure that all licensees who have been affected by the error are informed of the Notice and of the nature and cause of the error,

- iii. the cutting authority or authorities under which the error was made shall be reappraised or the quarterly stumpage adjustment recalculated to correct the error unless the cutting authority, the *Interior Appraisal Manual* or the application in tender for a timber sale licence specified that the stumpage rate is fixed, and
- iv. the effective date of the redetermined rate shall be the first day of the month following the date on which the Notice was received by the Regional Manager or the Director of Revenue Branch,
- f. if an error has occurred and no Notice has been given with respect to it, the Notice shall be deemed to have been given on the date on which the Regional Manager or the Director of Revenue Branch, became aware of the error or probable error,
- g. no person who discovers or otherwise becomes aware of a mathematical error in a stumpage determination shall be obliged to send the Notice as required herein if that person, on reasonable grounds, believes that someone else has sent the Notice with respect to the same error,
- h. the redetermined rate does not apply to timber scaled before the first of the month following the date upon which the Notice was given. No remedy will be available with respect to timber scaled before the first of the month,
- i. in this section, a mathematical error is any of the following:
 - i. an error in transcribing or compiling approved cruise field data, or in the application of approved loss factors and taper equations,
 - ii. an error in a calculation made as part of the data submission,
 - iii. an error in transcribing the data from an approved data submission or in performing the calculation specified in the manual, and
 - iv. an error in the application of published appraisal parameters,

A difference between cruise estimates and actual timber quality or quantity does not constitute an error in the appraisal.

A difference between appraisal estimates of selling price or operating cost and the licensee's experience does not constitute an error in the appraisal.

Omission of data by the licensee on an approved data submission does not constitute an error in the appraisal.

4.1.1 Specified Operations

In addition to the logging methods and phase costs that are covered by this manual, there are specified operations which require special cost estimating. Table 4-1 contains a complete list of specified operations for which certain phase cost estimates are based on the information on hand rather than on the tables and formulas in this manual. Other phase cost estimates in this manual are combined with the specified operation cost estimate to determine the total operating cost. Where appropriate, specified operations are weighted according to the applicable net cruise volume.

Specified operations shall be recognised only when the treatment is required within the Silviculture Prescription, Cutting Authority Document or the Forest Development Plan as dictated by site conditions. Where a specific treatment is not required based on these conditions, the conventional cost estimate shall apply.

Further information on specified operations may be obtained from the Regional Appraisal Coordinators.

Table 4-1 Specified Operations

Specified Operations	Affected Phase
Salvage of small patches of damaged or diseased timber dispersed over a large area ¹	Tree-to-Truck (Section 4.4), Transportation (Section 4.5.1 and 4.5.2), Road Maintenance (Section 4.6), Overhead (Section 4.8.1), and Silviculture (Section 4.10).
Kinbasket Lake Barge/Ferry not used for truck haul (private)	Special Transportation Systems (Section 4.5.4)
Root Disease Control (Pushover Logging and Stump Removal) ²	Silviculture (Section 4.10)
Skidder Swinging (includes all ground skidding methods) ³	Tree-to Truck (Section 4.4)

1. The Regional Manager or their designate will determine which of the affected phases listed in the table apply.
2. Felling of trees by pushing them over to expose the root ball for root disease control purposes. The root balls may or may not be piled and burned.
3. Skidder swing will only be considered between harvest methods listed in Section 4.4.1 (four methods), in order to deliver logs to an existing or appraised road/landing.

4.2 Appraisal Data Requirements

The cruise and all other pertinent information required for the appraisal must be submitted by the licensee with the appropriate Interior Appraisal Data Submission to the District Manager.

Unless otherwise specified by the Director, Revenue Branch, cruise data must be gathered and compiled according to the approved interior standard timber utilization specifications in Table 4-2 below and in accordance with the following Ministry of Forests publications:

- *Cruising Manual* (*Cruising Manual* web site: <http://www.for.gov.bc.ca/revenue/manuals/cruising/>),
- *Cruise Compilation User Manual*,
- *Cruise Compilation Design Manual*,
- Regional Publications - (e.g., *Operational Cruising Requirements in a Forest Region*), and
- Forest Service Policies - (e.g., *Timber Utilization Standards, Policies & Procedures for the Interior of the Province*).

Table 4-2 Standard Timber Utilization Requirements

Description	
The following standard timber utilization requirements must be used for all appraisals.	
Stumps (Measured on the side of the stump adjacent to the highest ground.)	
• no higher than	30.0 cm
Diameter (outside bark) at stump height	
• lodgepole pine: all timber that meets or exceeds	15.0 cm
• all other species: all timber that meets or exceeds	20.0 cm
Top diameter (inside bark or slab thickness)	
• for all species and ages, except cedar older than 141 years, all timber that meets or exceeds	10.0 cm
Top diameter (inside bark or slab thickness)	
• for cedar older than 141 years, all timber that meets or exceeds	15.0 cm
Minimum length	
• log or slab	3.0 m

In order to verify the accuracy of the cruise compilation program, the licensee must provide, on request, photocopies of the tally sheets and a magnetic copy of the data list in a format prescribed by the Regional Manager.

For isolated cutting authorities (see Section 4.8.2), the distance to support centre is the one-way road distance from the geographic centre of the cutting authority to the isolated camp or where there is no isolated camp, to a community from the list above. Where more than one alternative is possible, the least cost alternative is used. The distance is measured to the nearest kilometre.

The following distance variables are included:

- NEWDIST200 = 0 IF DS ≤ 100 km
 = (DS-100) if DS > 100 km and ≤ 200 km
 = 100 if DS > 200 km
- NEWDIST250 = 0 if DS ≤ 100 km
 = (DS-100) if DS > 100 km and ≤ 250 km
 = 150 if DS > 250 km

7. Volume per Tree (VOLTREE)

The average net cruise volume per tree (m^3), rounded to two decimals. For partial cutting, it is based on the trees to be harvested.

8. Gross Volume per Tree (GVOL)

Gross volume per tree (m^3) is computed as: $\text{VOLTREE}/(1 - \text{defect \%}/100)$.

Where:

Defect is the estimate of decay, waste and breakage (DWB) percent of the coniferous gross volume from the cruise summary for the trees to be harvested. Where utilization of deciduous volume is mandatory under the licence, defect percent is taken from the stand volume of the cruise summary. Defect percent is recorded to the nearest whole percentage point for appraisal calculation purposes.

9. Small Tree Volume (SMALL TREEVOL)

$\text{SMALLTREEVOL} = \text{Average net merchantable volume } (\text{m}^3) \text{ per tree if } < 0.30 \text{ m}^3/\text{tree}$. If $\geq 0.30 \text{ m}^3/\text{tree}$ $\text{SMALLTREEVOL} = 0$.

10. Small Tree Dummy Variable (SMALLTREED)

SMALLTREED = 1 if average net merchantable volume per tree $< 0.30 \text{ m}^3/\text{tree}$, otherwise = 0.

11. Heli Yarding Distance (HELIYARD)

The average loaded horizontal yarding distance (in kilometres) flown by helicopter measured to the nearest 0.1 km.

12. Skyline Yarding Distance (SKYYARD)

Average skyline slope distance (m).

13. Species Percent

Where a phase cost estimate includes a specific species variable, the appropriate species volume (from the Harvest Method Summary of the Cruise Compilation) should be entered on the Appraisal Data Submission. The percent will be calculated automatically.

He - Hemlock

Sp - Spruce

Fi - Fir

Pl - Lodgepole Pine

14. FNP = Fort Nelson, Peace River area consisting of the Fort Nelson, Fort St. John and Dawson Creek Forest Districts.

15. Biogeoclimatic Zones

CWH/MH	-	Coastal Western Hemlock/Mountain Hemlock
BWBS	-	Boreal White and Black Spruce
ICH	-	Interior Cedar Hemlock
SBS	-	Sub Boreal Spruce
SBPS	-	Sub Boreal Pine/Spruce
ESSF	-	Engelmann Spruce - Subalpine Fir
MS	-	Montane Spruce
IDF	-	Interior Douglas Fir

The cycle consists of loading, hauling, weighing, unloading, return time, and unavoidable delays. The cycle time will normally be determined by taking into consideration all the factors that may affect it: distance, expected rate of speed, necessary delays, expected standard of roads and their maintenance, traffic density, and seasonal weather conditions.

In many cases standard cycle time schedules from specific road junctions to the point of appraisal have been developed and should be used (Sector times).

Unavoidable delays are periods when the truck is on the job but not operating due to unpredictable delays such as; tightening binder chains, minor repairs made by driver, checking and adjusting brakes, minor delays prior to loading and unloading, refuelling, etc. Unavoidable delay time does not include any breakdown which requires shop repair, the services of a skilled mechanic, or a spilled load of logs. The time for load, unload and unavoidable delay is set at 75 minutes for cable yarding systems (see Section 4.4.3 (4)) and 60 minutes for all other systems (see Section 4.4.3 (1), (2), & (3)).

3. Haul Method

Cost estimates do not recognize different types of logging trucks. The estimate is based upon the possible haul method, either highway or off-highway and not specifically on the licensee's particular method.

Highway hauling is assumed when loaded logging trucks must travel in part over roads administered under the *Highway Act*, without truck-to-truck transfer, to the point of appraisal, or on roads administered under the *Highway (Industrial) Act* where prolonged known road restrictions prevent the use of oversize loads, or in all instances where the volume per tree is less than 0.20 m^3 .

Off-highway hauling is assumed when loaded logging trucks can travel over roads administered under the *Highway (Industrial) Act* to the point of appraisal, or to a recognized reload. Where prolonged known restrictions (e.g., bridge load limit, narrow road, through rock cut, WCB Regulations, etc.) prevent the use of oversize loads, highway haul is assumed.

4.5.2 Truck Haul Cost Estimates

4.5.2.1 Primary Haul

The primary truck haul cost estimate is determined from the following equation.

1. Highway Haul

For all highway haul equations if the CT is greater than 0 then the minimum is \$0.14/m³. If CT = 0 then \$/m³ = 0.

$$\$/m^3 = \text{CONSTANT} + (2.02 * CT) - (1.01 * CE\%/100) + (2.24 * HE\%/100) + (1.23 * LA\%/100) - (0.32 * PL\%/100) - (1.75 * PW\%/100) - (0.89 * SP\%/100)$$

Where:

REGION	:	Kamloops	Prince George *	Other
CONSTANT	=	-0.13	-0.48	0.12

* Excluding FNP

2. Off-Highway Haul

For all off-highway haul equations if CT is greater than 0 then the minimum is \$0.29/m³. If CT = 0 then \$/m³ = 0.

$$\$/m^3 = \text{CONSTANT} + (1.38 * CT) - (2.22 * CE\%/100) + (1.12 * HE\%/100) - (0.46 * SP\%/100)$$

Where:

REGION	:	Cariboo	Kamloops	Nelson	Other
CONSTANT	=	1.36	1.13	1.26	0.54

For both highway and off-highway.

CT = Cycle time to the nearest 0.1 hours

CE = Cedar LA = Larch

HE = Hemlock SP = Spruce

PL = Lodgepole Pine PW = White Pine

For both hauling equations, the species listed are the species percents taken from the Appraisal Data Submission to the nearest 1.0 percent.

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 Appraisal Data Submission; and
- b. receive written approval of the road or land use charge from the Regional Manager.

1. Charges as a Share of Road Maintenance

- a. 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, their 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.

4.8 Administration and Other Costs

4.8.1 Overhead

Overhead cost estimates are for the related administration and supervisory activities attributed to development, tree-to-truck, transportation and basic silviculture that occur at the head office, branch office and camp or operation.

Overhead costs include:

- Office Operations,
- Scaling,
- Cruising,
- Environmental Protection,
- Consultants fees (Section 4.3.3),
- Archaeological surveys,
- Waste and Residue surveys,
- Right-of-way easements,
- Foreshore and other land leases,
- Tree marking Beetle probing & Pheromone baiting,
- Engineering (road layout, survey (including geotechnical surveys), and design), other than those applicable as Engineered Cost Estimate.

Cost estimates by forest district are shown in the following table:

Table 4-8 Overhead Cost Estimates

District	\$/m ³	District	\$/m ³
100 Mile House	7.17	Kispiox	7.50
Arrow	10.10	Kootenay Lake	10.31
Boundary	7.79	Lakes	6.66
Bulkley (Cassiar)	6.73	Lillooet	11.08
Chilcotin	6.48	Mackenzie	6.83
Clearwater	9.09	Merritt	7.20
Columbia (Golden, Revelstoke)	12.24	Morice	6.59
Cranbrook	8.09	Penticton	7.55
Dawson Creek	7.30	Prince George	6.85
Fort Nelson	6.07	Quesnel	6.95
Fort St. James	6.78	Robson Valley	9.37
Fort St. John	6.40	Salmon Arm	8.47
Horsefly	7.09	Vanderhoof	6.61
Invermere	9.43	Vernon	7.53
Kalum	10.84	Williams Lake	7.45
Kamloops	7.65		

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INTERIOR APPRAISAL DATA SUBMISSION

Licence _____ Permit _____ Mark _____

ACKNOWLEDGEMENTS

This Appraisal Data Submission contains, as of this date, truthful information on the timber to be harvested, site conditions, harvesting, development, and silviculture plans and other information, all prepared according to the *Interior Appraisal Manual*.

Registered Professional Forester:

Name:	R.P.F.	RPF's Signature and Seal:
R.P.F. #:		
Phone: ()		
Fax: ()		
E-mail Address:		
Date (ccyy/mm/dd):		

The information contained in this package may be released under the *Freedom of Information and Protection of Privacy Act*.

INTERIOR APPRAISAL DATA SUBMISSION

Mark: _____ Ref Mark: _____
 Effective Date: _____ Expiry Date: _____

Appraisal Type
 (Check one): New ☐ Reappraisal ☐ Advertise (SBFEP only) ☐

Tenure Type _____ TSA _____ Supply Block _____

Total Net Cruise Volume _____ m³ Total Merchantable area of licence/CP _____ ha

Volume for Roads & Landings _____ m³ Area removed for roads & landings _____ ha

Volume for Reserved Area(s)
 (Riparian, lakeshore, etc.) _____ m³ Area removed for Reserved Area(s) _____ ha

Volume to be Partial Cut _____ m³ Area of Partial Cut _____ ha

Volume of Clear Cut _____ m³ Area of Clear Cut _____ ha

Point of Appraisal
 (Section 2.5) _____ Actual Destination _____

Geographical Location _____

Specified Operation?
 (Section 4.1.1) Y ☐ N ☐ Cruise Base? Y ☐ N ☐

F.I. Reg. No. _____ F.I. Compt. No. _____ F.I. Zone _____ Wet or Dry? _____

Species	Volume ^❶	Decay	Stud Log	LRF	Burn	Revenue Office Use Only	
	m ³	%	%		%	Comp. Ind.	S.P. Zone
BA							
CE							
FI							
HE							
LA							
LO							
SP							
YE							
WH							
TOTAL *		Other species tied to: _____					

* To be harvested.

❶ From the Cutting Permit Summary of the Cruise Compilation.

Check cruised? Y ☐ N ☐ Standard Error? N ☐ Y ☐ _____

INTERIOR APPRAISAL DATA SUBMISSION

Tree to Truck Data

Support Centre _____ Distance to Support Centre _____ km

(Section 4.4.2(6)) _____ one way

Specified Logging Operation * (Section 4.1.1) _____

Description _____ Volume (m³) _____ Cost (\$) _____

(Attach detailed estimates)

	GROUND SKIDDING		GRAPPLE/HIGHLEAD				SKYLINE	
	Clear Cut	Partial Cut*	Clear Cut		Partial Cut *		PI	Total
			He	PI	He	PI		
Vol. To be harvested (m ³) ①								
Biogeoclimatic zone								
Volume/tree (m ³)								
Volume/hectare (m ³)								
Stand defect (%)								
Partial cut (%)								
Average slope (%)								
Blowdown (%)								
Heavy fire damage (%)								
Dead useless snags (%)								
Skyline Yarding Dist. (m)								

	HELICOPTER				HORSE	
	He	Fi	Sp	PI	Total	Total
Vol. To be harvested (m ³) ①						
Biogeoclimatic zone						
Average slope (%)						
Helicopter Yarding Distance (km)						

① Volumes from the Harvest Method Summary of the Cruise Compilation.

He - Hemlock Sp - Spruce * Partial Cut % > = 90 are to be appraised as Clear Cut (See Section 4.4.2(5))
 Fi - Fir PI - Lodgepole Pine

INTERIOR APPRAISAL DATA SUBMISSION

Log Transportation Data (Section 4.5)

A. Truck Haul

Primary ☐ Highway ☐ Off Highway ☐ Primary Cycle Time _____ hours
 If Secondary Haul Secondary Cycle _____ hours

COMMON JUNCTION CALCULATION				
Cut Block	Volume (m3) (A)	Distance (km)	Time (minutes)	M3 x minutes (B)

PRIMARY CYCLE TIME CALCULATION							
Road			Distance D (km)	Speed (km/hr)		Time (nearest 1.0 min)	
Identifier	Primary	Secondary		Loaded	Empty	Loaded	Empty
SUBTOTAL						L =	E =

Load Handling, Delay in minutes

Total Cycle Time, Minutes (L + E + D)

Divided by 60 = _____ hrs (0.1)

INTERIOR APPRAISAL DATA SUBMISSION

B. Water Transportation (Section 4.5.3)

Lake Name		Code	
Dump & Boom	Yes ☐	No ☐	
Lake Tow			km
Dewater/Reload	Yes ☐	No ☐	
Road	Yes ☐	No ☐	
Road User			(\$/m ³)

C. Special Transportation Systems (Section 4.5.4)

Description	Location	Code	* Applicable Volume (m ³)
1. Railway			
Truck to Rail Transfer	No ☐ - BC Rail	Yes ☐ RTD	
	Dease Lk	Yes ☐ RTA	
	- All other railways	Yes ☐ RLE	
Rail Transportation	No ☐ Leo Creek	Yes ☐ RLO	
	Lovell	Yes ☐ RBL	
	Bear Lake	Yes ☐ RMT	
	Minaret Lake	Yes ☐ RNL	
	Niteal	Yes ☐	
2. Barge Ferry Used for Truck Haul			
	No ☐ - Reservoir Lakes	Yes ☐ BUK	
		BUO	
		BUR	
		BUW	
	- Natural Lakes	Yes ☐ BUA	
3. Barge Ferry Used for Crew Transportation			
	No ☐ All Lakes	Yes ☐ BFA	
Specified Logging Operation * (Section 4.1.1)			
Kinbasket Lake Barge/Ferry not used for truck haul		Cost \$/m ³	

* Complete only when different from cutting authority.

INTERIOR APPRAISAL DATA SUBMISSION

Administration and Other Costs (Section 4.8)

Isolated Cutting Authority
(Section 4.8.2)

No ☐

Yes ☐

Rail (Code 4)

Yes ☐

Lake or Ocean (Code 3)

INTERIOR APPRAISAL DATA SUBMISSION

Road and Drainage Structures (New, Reconstruction & Upgrade)

1. Culverts (Tabulated) (Section 4.3.2.4)

Applicable Volume * _____ (m³)

Circular Pipe Diameter (m)	Circular Pipe Length (m)	Number

2. Bridges (Tabular & Engineered) (Section 4.3.2.4 & 4.3.3)

Applicable Volume * _____ (m³)

Bridge Identifier	Average Crib Height (m)	Span Length (m)	Cost (\$) (Engineered Only)

* Applicable Volume: Complete only when different from Cutting Authority Volume.

Note: Tabular = Table in manual for spans 15.4 m and under

Note: Engineered = For all other spans, provide details on Construction Estimate Form.

INTERIOR APPRAISAL DATA SUBMISSION

3. Tabular Road Construction Data (New Construction Only) (Section 4.3.2)

Road Identifier: _____

Road Group : (see Table 4-3) _____

Biogeoclimatic Zone: _____ Applicable Volume: _____ (m³)

Road Section Number	Road ❶ Type O, B, W	Section Length (km)	Subgrade			Stabilizing Material		
			Soil ❷ Moisture (blank, W)	Side Slope (%)	Rock (%)	Stab. Length (km)	Mat. ❸ Type (blank, Q)	Ballast ❹ Haul Distance (km)
Total Length			Attach additional pages where necessary.					

- ❶ Road Type - Must enter one of "O" = operational road, "B" = block road, or "W" = snow (winter) road.
- ❷ Soil Moisture (SMR) - If the road section is wet (Section 4.3.2.2(5)) enter "W". Otherwise leave blank.
- ❸ Material Type - If the stabilizing material is quarried rock enter "Q". Otherwise leave blank.
- ❹ Ballast Haul Distance - One way.

INTERIOR APPRAISAL DATA SUBMISSION

4. Other Structures (Section 4.3.2.6)

Type	Number	Distance
Fencing (in 100's of metres)		
Cattle Guards		
Pipeline Crossings		

5. Allocated Development (SBFEP)

Identifier	Cost (\$)	Applicable Volume (m ³)	Applicable Cost (\$)

6. Engineered Development

Identifier	Cost (\$)	Applicable Volume (m ³)	Applicable Cost (\$)

INTERIOR APPRAISAL DATA SUBMISSION

Engineered Construction Cost Estimates

Licence: _____ C.P.: _____ Estimate Date: _____

Name and/or Location: _____

Description: _____

Effective date of Engineered Estimate: _____

	Type	Function	Hours	Rate/Hour	Total
1. Comp. Bid Costs:	N/A	N/A	N/A	N/A	
2. Machine Cost:					
3. Labour Cost:					
4. Materials Cost:					
5. Freight & Haulage for materials only:					
6. Engineering (if applicable)					
Total Cost (July 1, 1998)					

1. Refer to Appendix 1 of the *Interior Appraisal Manual* for further information on equipment, labour and material rates.
2. List each machine employed and work performed.
4. Freight and haulage is allowed for permanent type bridges (i.e., steel, concrete, or glu-lam).
5. Cost of design and engineering for log bridges is not allowed. Cost of design inspection and supervision for other more complex structures by a professional engineer not on salary may be allowed.
6. No GST to be included, PST is allowed on materials.

INTERIOR APPRAISAL DATA SUBMISSION

Basic Silviculture (Section 4.10)

Treatment Regime	Net Merchantable (ha)	Treatment Area (hectares) NCBR ** (individual areas of 4 ha or less)	Removal Factor

Specified Operation (Root Disease Control) (Section 4.1.1)

Area (ha) _____ Total Cost (\$) _____ Cost Estimate (\$/m³) _____

** If more than 4 ha confirm that individual areas are smaller than 4 ha in size.

INTERIOR APPRAISAL DATA SUBMISSION

Ministry of Forests

Request for Approval

Road and Land Use Charge in Appraisals

Region	_____	Right-of-way Acquisition
District	_____	Request Form
Location	_____	File No. _____ (FS 959)
Licensee	_____	
Private Land Owner	_____	

Cutting Authorities Affected (Volumes and Time Frame):

Reason for Request:

Determination of Cost Estimates (provide details of Calculation):

Mandatory Attachments:

Map ☐

And Agreement for Charges ☐

Is this Road Use Agreement made at 'arms length'?

Yes ☐

No ☐

Requested by: Licensee _____ Date _____

Requested by: District _____ Date _____

Region _____ Date _____

Approved _____ Date _____

Comments

INTERIOR APPRAISAL DATA SUBMISSION

Small Business Forest Enterprise Program

	Sawlogs	Grade 3	Grades 4, 5, 6
Include Levy for Basic Silviculture? * (Y/N)	_____	_____	_____
Include Levy for Development? * (Y/N)	_____	_____	_____
"Developed" Levy (if applicable)	_____		
Bonus Bid (if applicable)	_____		
Deciduous and Special Products	Bonus Bid?		

* **Levies:** District Manager may waive either levy, or both, where no Crown expenditure is required and/or the timber will be sold through competition. Levies added if no choice made.

Mandatory Utilization (for Residue and Waste Billing, **SPFEP ONLY**)

Identify from the following list **only** those species, grades and products that are **non-competitive**, but subject to mandatory utilization.

Species	Grade (Circle all Applicable)				Miscellaneous Product (List all Applicable)
CE	S/L	3	4	5	
HE	S/L	3	4	5	
LO	S/L	3	4	5	
Deciduous		AS	BI	CO	
All Others	S/L	3	4	5	

Remarks:

INTERIOR APPRAISAL DATA SUBMISSION

Control Sheet

Region: _____ **District** _____

Licence _____		Permit _____		Mark _____	
Forest District					
Receipt of Submission in District Office				CCYY	Date MM DD
Data Submission Reviewed By: (Print Name)		Signature:		CCYY	Date MM DD
Comments:					
Forest Region					
Reviewed by:				CCYY	Date MM DD

