

Concurrent Residual Harvest System – Interior (CRHS)

Interpretation - For the purpose of this document the following applies.

Affected by Fire (Burnt) – altered by fire and the load is showing evidence of being scorched or having char.

Overview

The primary purpose of the Concurrent Residual Harvest System (CRHS) is to provide an alternative method of scale for low quality timber harvested in the Interior as per Section 5 (1) (c) (iii) of the *Scaling Regulation*. This process is designed to be revenue and cut control neutral. The objective is to reduce the administrative burden associated with low quality timber delivered to secondary manufacturing facilities* and thereby improve utilization of forest resources. This system will not apply to BC Timber Sales licenses. Material bound for sawmills or plywood/veneer/OSB plants is not eligible for this process.

Requirements

This process is voluntary and must have a business to business agreement between the primary harvester and the secondary manufacturer. Concurrent with normal block harvesting activities, residual material will be transported to an authorized weight scale, where it will be weighed into a specific stratum designed for the product for which the material is intended. The Load Description Slip (LDS), required to accompany the load must clearly state 'CRHS' ('Burnt CRHS' for fire affected timber) and the type of secondary manufacturing the material is intended for, i.e. pellets, post and rail, firewood, cants or pulp. The scale site may re-sort the timber after weighing in order to manufacture more than one secondary product at the site, but timber must not be resold or transported off site before manufacture into a secondary product. All CRHS material must be removed from a cutblock prior to the start of a waste survey and prior to the expiry of the cutting authority. To be eligible for 'burnt' strata, timber weighers must be able to determine that the timber has been affected by fire.

Fixed Ratio Tables

The tables have been designed so that each type of product produced by a secondary facility will utilize a specific volume to weight ratio in a fixed ratio stratum. The ratio and grade profile will be in place beginning on April 1, 2019 and may be adjusted. The ratio is based on an average of similar average volume/weight ratios in the Harvest Billing System (HBS) database, local field assessments, and/or other methods. The table for chips and hog fuel (Processed Deliveries) contains ratios for onsite chipping or grinding brought to the weigh scale in a processed form for the use of a secondary facility.

NEW Additional strata have been added to facilitate the delivery of low-quality timber affected by fire (identified as burnt). Data for these new strata was sourced from burnt pulp strata in 2023 sample plans.

*A secondary manufacturing facility is defined as a processing mill that does not produce commodity lumber, plywood/veneer/OSB.

Grade Tables and Species

Average weighted grade profiles have been calculated using HBS and observed data. The attached tables (Appendix 1) must be used when entering the fixed ratio strata for each product type into HBS. Strata for pulp have been separated by species and ratio. These ratios and grade profiles are the weighted averages of 2017 and recent HBS data. A separate regional population will be used for CRHS strata. The applicable *Species* profile will be determined by Area/District staff and the Industry application for each *type of stratum*. This will be used in setting up the CRHS strata in the HBS. See an example of the HBS strata setup in Appendix 2. The rate used for billing will be timber mark specific.

Weighing Process

All CRHS material must be weighed at an authorized weigh scale. If weighed at a scale other than the receiving secondary facility, the HBS Weighing Event Type must be Primary Departure as each load must be sent to the secondary facility after weighing. A generic district destination code may be used if the facility does not have an authorized scale site. Timber weighers at the scale site will be required to stratify loads according to the materials that can be seen. If a load destined for CRHS doesn't meet the stratum description as set out in the CRHS tables, the timber weigher must stratify the load into an appropriate population/stratum or *Red Tag* the load, meaning the load will be taken out of the weight billing process and *Piece Scaled*. Processed Material (Hog Fuel and Wood Chips) may be delivered to an Unattended Site. The Pellets/Bioenergy stratum which is transported as logs and not ground material or hog fuel, may also be delivered to an Unattended site provided the Conditions of the Unattended Weighing of Pellets/Bio-Energy Stratum procedures can be met.

Decking and Storage of CRHS

- Sites with both primary and secondary manufacturing facilities must have the capacity to ensure separation of CRHS material (by stratum) and non-CRHS strata
- CRHS weighed into a CRHS stratum must be used at the secondary facility it is destined for.
- CRHS material shall never be 'sorted' to remove the sawlog component and sell it on.

Decking and storage facilities may be inspected to ensure that sites have the ability to comply with the requirements for decking and storage of CRHS material. Remote decking of CRHS material is not permitted at Interior Decked Timber Temporary Scale Sites. Permission for remote decking of scaled CRHS material is required from the District Manager and shall be communicated to the Area Scaling Staff. Offsite storage of unscaled CRHS material is not permitted.

Authorization

The Director, Timber Pricing Branch has authorized the CRHS alternate methods of scale under *Scaling Regulation S 5 (1) (c) (iii)*. District Managers may authorize this process to be used under a CRHS Authorization, signed by the District Manager of the District in which the timber originates. A Waste assessment of the block will be required as per the *Forest Act* and the *Provincial Logging Residue and Waste Measurements Procedure Manual*. This CRHS program may be cancelled with 6 months' notice. A copy of each authorization will be filed at the Area and will be compiled monthly for reporting purposes.

Appendix 1

Pulp Volume/Weight Ratio and Grade Profile Tables

Stratum Description	Vol/Wt Ratio	Grade 1 %	Grade 2 %	Grade 4 %	Grade 6 %	Grade Z %
Green HE Pulp <15% (G1&2) >70% Green	0.99	1.02	8.73	88.84	0.13	1.28
Green FI/LA Pulp < 15% (G1&2) >70% Green	1.26	1.28	13.13	76.27	5.18	4.14
Green White Wood Pulp < 15% (G1&2)>70% Green	1.31	0.51	9.04	83.46	1.67	5.32
Dry Pulp < 15% (G1&2) >50% Dry	1.51	1.35	6.21	90.29	0.54	1.61
Cedar Pulp <20% (G1&2)	1.32	0.70	16.08	76.78	1.83	4.61
Tops and Undersized Pulp <20% (G1&2)	1.23	0.79	19.07	35.86	21.71	22.53
Burnt White Wood Pulp <20% (G1&2)	1.67	0.00	19.53	63.59	8.95	7.93
Burnt Mixed Species Pulp <15% (G1&2)	1.71	0.61	11.48	83.98	2.08	1.85
Burnt Fir (Thick Bark) Pulp <20% (G1&2)	1.46	0.00	15.57	73.01	9.28	2.14

Pulp strata descriptions in HBS will include the proportion of green or dry timber for the strata used. Green pulp strata are described as having >70% green material on the load and dry strata is described as having >50% dry material in the load.

Facility Type Volume/Weight Ratio and Grade Profile Tables

Facility Type/Product Strata	Vol/Wt Ratio	Grade 1 %	Grade 2 %	Grade 4 %	Grade 6 %	Grade Z %
Firewood < 15% (G1&2)	1.47	0.30	10.40	88.60	0.50	0.20
Cants < 20% (G1&2)	1.57	0.00	15.30	84.70	0.00	0.00
Round Post and Rail < 50% (G1&2)	1.28	0.00	42.46	20.65	18.72	18.18
Split Post and Rail < 40% G1&2)	1.18	0.00	19.15	76.06	0.07	4.72
Pellets/Bio-Energy < 5%(G1&2)	1.23	0.20	2.70	85.70	0.01	11.40
Burnt Bio-Energy <10% (G1&2)	1.67	0.00	7.85	88.63	2.34	1.18

Appendix 1 continued

Processed Material Delivery Ratio and Grade Profile Table

Facility Type/Processed Material	Vol/Wt Ratio	Grade 1 %	Grade 2 %	Grade 4 %	Grade 6 %	Grade Z %
*Hog Fuel: < 5% G1 & G2	1.65	0.00	3.12	77.86	6.27	12.75
Hog Fuel: 5 to 22% G1 & G2	1.65	1.20	11.26	65.42	10.50	11.62
Hog Fuel: 23 to 40% G1 & G2	1.65	2.23	29.42	45.23	12.50	10.62
Hog Fuel: 41 to 60% G1 & G2	1.65	3.64	45.54	31.11	10.15	9.56
Hog Fuel: 61 to 80% G1 & G2	1.65	8.32	64.78	10.47	8.11	8.32
*Wood Chips: < 23% G1 & G2	1.45	2.26	19.32	67.57	4.80	6.05
Wood Chips: 24 to 40% G1 & G2	1.45	3.46	28.26	58.37	3.86	6.05
Wood Chips: 41 to 60% G1 & G2	1.45	6.46	45.12	40.17	3.20	5.05
Wood Chips: 61 to 80% G1 & G2	1.45	8.46	62.78	21.91	2.80	4.05
Wood Chips: 81 to 100% G1 & G2	1.45	9.66	76.22	10.47	1.60	2.05

*Hog Fuel <5% G1 & G2 stratum and *Wood Chips <23% G1 & G2 stratum may not require grade profile estimates if these strata are used in combination with maximized utilization through primary sawlog harvesting/scaling. A grade profile estimate must be provided at the request of the District Manager or Area Scaling Staff. Wildfire Risk Reduction and Salvage Tenures wanting to utilize Hog Fuel & Wood Chip strata must attach a grade profile estimate to the CRHS application, (see grade profile estimate requirements below).

For timber marks that will be 100% hogged and/or chipped, an estimated grade profile is required prior to receiving authorization to use the stratum that contains the grade profile in the estimate. The grade profile estimate must be signed by an RPF, RFT or Licenced Scaler, must include information on how the estimate was derived and must be attached to the CRHS application submitted to the District Manager. Area Scaling Staff shall review the grade profile estimate prior to issuing the appropriate stratum. Area Scaling Staff may require a ministry approved sampling process for decked timber piles if the grade profile estimate does not provide adequate information to determine the appropriate stratum before commencement of harvesting. Only one grade-estimated Hog Fuel stratum and one grade-estimated Wood Chip stratum may be used on a single timber mark that will be 100% hogged and/or chipped.

District and/or Area scaling staff must have an opportunity to check the estimated grade profile. If the inspection shows that the initial grade estimate is not representative of the grades in the decked timber, a more appropriate stratum will be selected for use.

Appendix 2

Licensees electing to scale under the CRHS process must advise the Area staff in order to have strata designed for their use. At the time of entering the fixed ratio CRHS strata into the Harvest Billing System, Ministry staff will consult with the Licensee on the species profile of the material and will enter the species as a percentage ratio of the total vol/weight ratio for the stratum. The species profile is particularly important for tenures utilizing tabular stumpage rates by species.

Example: Stratum Species/Grade Ratio Breakdown:

Facility Type	Volume/Weight Ratio		Ratio Table for Stratum 09					
	0.99		Grade Profile	G1-1.02%	G2-8.73%	G4-88.84%	G6-0.13%	GZ - 1.28%
HE Pulp	BA	10			0.00102	0.00773	0.08784	0.00001
	CE	10		0.00102	0.00773	0.08784	0.00001	0.00124
	HE	80		0.00816	0.06984	0.71072	0.00010	0.01024

This Species/Grade and Ratio information will be entered in HBS by Area staff as:

Stratum	Stratum Name	Grade Schedule	Product Schedule
09	HE Pulp	Interior Grades	Logs

Species	Grade	Ratio	Fraction
Balsam	1	0.00102	0.1%
Balsam	2	0.00773	0.78%
Balsam	4	0.08784	8.83%
Balsam	6	0.00001	0.0%
Balsam	Z	0.00124	0.12%
Cedar	1	0.00102	0.1%
Cedar	2	0.00773	0.78%
Cedar	4	0.08784	8.83%
Cedar	6	0.00001	0.0%
Cedar	Z	0.00124	0.12%
Hemlock	1	0.00816	0.82%
Hemlock	2	0.06984	7.02%
Hemlock	4	0.71072	71.45%
Hemlock	6	0.00010	0.01%
Hemlock	Z	0.01024	1.03%
Totals		0.99474	