

# Concurrent Residual Harvest System – Interior (CRHS)

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 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’ 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 may not be resold or transported off site before manufacture into a secondary product.

## 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 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.

## 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 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 HBS. See an example of HBS strata setup in Appendix 2. The rate used for billing will be timbermark 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

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

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as set out in the CRHS tables then the timber weigher will be required to stratify the load into a different population/stratum or *Red Tag* the load, meaning the load will be taken out of the weight billing process and *Piece Scaled*. Processed Material (Hogfuel and Woodchips) may be delivered to an Unattended Site. The Pellets/Bioenergy stratum 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 must have the capacity to ensure separation of CRHS material (by stratum) and non-CRHS strata
- CRHS weighed into a CRHS stratum will be used at the secondary facility it is destined for.
- CRHS material will 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. Permission for remote decking will be required from the District Manager.

## 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 7 %
Green HE Pulp <15% (G1&2) >70% Green	<b>0.99</b>	<b>1.02</b>	<b>8.73</b>	<b>88.84</b>	<b>0.13</b>	<b>1.28</b>
Green FI/LA Pulp < 15% (G1&2) >70% Green	<b>1.26</b>	<b>1.28</b>	<b>13.13</b>	<b>76.27</b>	<b>5.18</b>	<b>4.14</b>
Green Whitewood Pulp < 15% (G1&2)>70% Green	<b>1.31</b>	<b>0.51</b>	<b>9.04</b>	<b>83.46</b>	<b>1.67</b>	<b>5.32</b>
Dry Pulp < 15% (G1&2) >50% Dry	<b>1.51</b>	<b>1.35</b>	<b>6.21</b>	<b>90.29</b>	<b>0.54</b>	<b>1.61</b>
Cedar Pulp <20% (G1&2)	<b>1.32</b>	<b>0.7</b>	<b>16.08</b>	<b>76.78</b>	<b>1.83</b>	<b>4.61</b>
Tops and Undersized Pulp <20% (G1&2)	<b>1.23</b>	<b>0.79</b>	<b>19.07</b>	<b>35.86</b>	<b>21.71</b>	<b>22.53</b>

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.

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## Facility Type Volume/Weight Ratio and Grade Profile Tables

Facility Type	<i>Vol/Wt Ratio</i>	<i>Grade 1 %</i>	<i>Grade 2 %</i>	<i>Grade 4 %</i>	<i>Grade 6 %</i>	<i>Grade Z %</i>
Firewood < 15% (G1&2)	<b>1.47</b>	<b>0.3</b>	<b>10.4</b>	<b>88.6</b>	<b>0.5</b>	<b>0.2</b>
Cants < 20% (G1&2)	<b>1.57</b>	<b>0</b>	<b>15.3</b>	<b>84.7</b>	<b>0</b>	<b>0</b>
Round Post and Rail < 50% (G1&2)	<b>1.28</b>	<b>0</b>	<b>42.46</b>	<b>20.65</b>	<b>18.72</b>	<b>18.18</b>
Split Post and Rail < 40% G1&2)	<b>1.18</b>	<b>0</b>	<b>19.15</b>	<b>76.06</b>	<b>0.07</b>	<b>4.72</b>
Pellets/Bio-Energy < 5%(G1&2)	<b>1.23</b>	<b>0.2</b>	<b>2.7</b>	<b>85.7</b>	<b>0.01</b>	<b>11.4</b>

## Processed Material Delivery Ratio and Grade Profile Table

Facility Type	<i>Vol/Wt Ratio</i>	<i>Grade 1 %</i>	<i>Grade 2 %</i>	<i>Grade 4 %</i>	<i>Grade 6 %</i>	<i>Grade Z %</i>
*Hog Fuel: < 5% G1 & G2	<b>1.65</b>	<b>0.00</b>	<b>3.12</b>	<b>77.86</b>	<b>6.27</b>	<b>12.75</b>
Hog Fuel: 5 to 22% G1 & G2	<b>1.65</b>	<b>1.20</b>	<b>11.26</b>	<b>65.42</b>	<b>10.5</b>	<b>11.62</b>
Hog Fuel: 23 to 40% G1 & G2	<b>1.65</b>	<b>2.23</b>	<b>29.42</b>	<b>45.23</b>	<b>12.5</b>	<b>10.62</b>
Hog Fuel: 41 to 60% G1 & G2	<b>1.65</b>	<b>3.64</b>	<b>45.54</b>	<b>31.11</b>	<b>10.15</b>	<b>9.56</b>
Hog Fuel: 61 to 80% G1 & G2	<b>1.65</b>	<b>8.32</b>	<b>64.78</b>	<b>10.47</b>	<b>8.11</b>	<b>8.32</b>
*Woodchips: < 23% G1 & G2	<b>1.45</b>	<b>2.26</b>	<b>19.32</b>	<b>67.57</b>	<b>4.80</b>	<b>6.05</b>
Woodchips: 24 to 40% G1 & G2	<b>1.45</b>	<b>3.46</b>	<b>28.26</b>	<b>58.37</b>	<b>3.86</b>	<b>6.05</b>
Woodchips: 41 to 60% G1 & G2	<b>1.45</b>	<b>6.46</b>	<b>45.12</b>	<b>40.17</b>	<b>3.20</b>	<b>5.05</b>
Woodchips: 61 to 80% G1 & G2	<b>1.45</b>	<b>8.46</b>	<b>62.78</b>	<b>21.91</b>	<b>2.80</b>	<b>4.05</b>
Woodchips: 81 to 100% G1 & G2	<b>1.45</b>	<b>9.66</b>	<b>76.22</b>	<b>10.47</b>	<b>1.60</b>	<b>2.05</b>

\*Hog Fuel <5% G1 & G2 stratum and \*Woodchips <23% G1 & G2 stratum do not require grade profile estimates if these strata are used in combination with maximized utilization through primary sawlog harvesting/scaling. New statement

For timbermarks 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 of 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. Only one grade-estimated Hog Fuel stratum and one grade-estimated Woodchip stratum may be used on a single timbermark that will be 100% hogged and/or chipped.

Districts must have an opportunity to check the estimated grade profile. If the district inspection shows that the initial grade estimate is not representative of the grades in the decked timber, the district may select a more appropriate stratum to be used.

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## Appendix 2

Licenses 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 Application 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.

### Example: Stratum Species/Grade Ratio Breakdown:

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

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%
<b>Totals</b>		<b>0.99474</b>	