## Government of Alberta

Sustainable Resource Development

### **Forest Management Plan Amendment**

Mountain Pine Beetle Addendum Forest Management Unit S20 Approval Decision

**Slave Lake Pulp Corporation A Division of West Fraser Timber** 

Forest Management Agreement #9000028

**Date: March 31, 2010 Effective: May 1, 2009** 

Approved by: Original Signed

Robert W. Stokes, RPF Acting Executive Director Forest Management Branch Forestry Division

#### **Executive Summary**

The Slave Lake Pulp Corporation (SLP) Forest Management Plan (FMP) Mountain Pine Beetle (MPB) amendment dated June 15, 2009 is approved subject to the satisfactory completion of the Approval Conditions contained in this document.

The MPB amendment has been validated<sup>1</sup> by a Regulated Forestry Professional (RFP). The Department recognizes RFP validated work as complete, accurate and prepared with professional due diligence. The MPB amendment has been reviewed and approved by government RFP's.

#### **Approval Decision Conditions Timeline Summary**

Condition	Page #	Requirement	Approval Authority	Date	
9.1 i.	4	Spatial Harvest Sequence	Senior Manager, Forest Planning Section	September 30, 2010	
10.1	5	Public Consultation	Senior Manager, Forest Planning Section	On-going	
10.2	5	First Nations Consultation	Senior Manager, Forest Planning Section	On-going	
11.0	5	Alberta Regeneration Information System	Senior Manager, Forest Planning Section	April 30, 2010	

#### Approved Annual Allowable Cuts

Timber Type	FMA Total AAC <sup>2</sup>
Coniferous	$836,816 \text{ m}^3$
Deciduous	$562,111 \text{ m}^3$
Total	$1,398,927 m^3$

Refer to the SLP FMA Structure Retention Strategy dated June 12, 2009 for further details on targets and monitoring. Industrial salvage volumes shall be reported as AAC drain by the FMA Company and embedded quota holders.

Refer to Tables 1 and 6 for the Historical Allocations, Tables 2 and 7 for the Approved Annual Allowable Cuts and Tables 3 and 8 for the Quadrant Allowable Cuts.

<sup>&</sup>lt;sup>1</sup> Refer to the Alberta Forest Management Planning Standard, Annex 2 for professional validation requirements.

<sup>&</sup>lt;sup>2</sup> The approved AACs include structure retention volumes.

Authorization
The Spatial Harvest Sequence (SHS) contained in this MPB amendment replaces the SHS contained in the FMP dated May 15, 2002.
The SHS contained in this MPB amendment is effective beginning May 1, 2009.
The AACs are effective beginning May 1, 2009.
The next FMP is due by April 30, 2019.

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#### 1.0 Introduction

Alberta is continuing to experience a significant outbreak of mountain pine beetle (MPB) and is applying control treatments and strategies to prevent future outbreaks<sup>3</sup>. Alberta is also implementing initiatives that will mitigate the impacts of the current outbreak on future timber supplies and forest-dependent communities. SLP Corporation's (SLP) addendum to its approved Forest Management Plan (FMP) meets the requirements established by Alberta for such amendments<sup>4</sup>. This Decision documents the rationale for approval and direction for ongoing work.

It is important to note the implementation of this plan is not intended to control the current MPB outbreak, but rather to take actions over the next twenty years to create a forest that is more resistant to such outbreaks by dramatically reducing the overall susceptibility of the pine forest (Pine Strategy). This is a prudent and necessary strategy to avoid the types of catastrophic changes being seen in British Columbia's pine forests. However, if the current outbreak in Alberta expands as rapidly as the British Columbia outbreak, the strategies in this plan will have to be modified to address that reality.

Alberta has directed<sup>5</sup> that key outcomes of three scenarios (the current management plan or status quo, the Pine Strategy and the MPB outbreak) be assessed. The Department believes given the MPB outbreak in Alberta, the current management plans do not present likely scenario's and considering today's circumstances, comparison of the Pine Strategy and the MPB outbreak scenarios are the pertinent analyses.

Alberta's goal is to mitigate the effects of MPB on the social, environmental and economic values of Alberta's forests. To achieve this goal, Alberta must make trade-offs which involve achieving a desired result, generally at the complete or partial expense of something else. Stakeholders are often interested in only one value and are not prepared to consider trade-offs, whereas Alberta must make trade-off decisions in order to reasonably meet its goal for the overall benefit of Albertans.

#### 2.0 Forest Management Planning Area

The area under consideration is the Forest Management Agreement (FMA) area of SLP. FMA #9000028 was allocated to SLP via legislative Order-in-Council (O.C. 614/90), dated November 7, 1990 and subsequently amended through Orders-in-Council 130/96, 26/99 and 219/2001.

The FMA is located in north central Alberta. The Upper Foothills, Lower Foothills and Central Mixedwood Natural Sub-regions cover the FMA.

In December 2008, the Alberta Land Use Framework (LUF) was released establishing a formal regional planning system to implement provincial policy, to set land-use management objectives and determine land-use trade-offs. Seven LUF regions were identified of which Forest Management Unit (FMU) S20 is located almost completely within the Upper Athabasca Planning Region with the exception of approximately one township in the southwest corner, which falls within the Upper Peace Planning Region.

<sup>&</sup>lt;sup>3</sup> See the Mountain Pine Beetle Action Plan for Alberta and the Interpretive Bulletin – Planning Mountain Pine Beetle Response Operations on the department of Sustainable Resource Development (SRD website).

<sup>&</sup>lt;sup>4</sup> See the Interpretive Bulletin – Planning Mountain Pine Beetle Response Operations (SRD website).

<sup>&</sup>lt;sup>5</sup> See the Interpretive Bulletin – Planning Mountain Pine Beetle Response Operations (SRD website).

#### 3.0 Forest Management Plans and Priority of MPB Control Strategies

The approved FMP amendment results in a new spatial harvest sequence (SHS) and timber supply. Commitments in the balance of the existing FMP remain in effect until they are replaced by a new FMP. The status of the MPB outbreak will be apparent in time for the preparation of the new FMP, which will then be better able to address trade-offs between key outcomes.

Due to high rates of MPB over-winter survival in 2009 and in-flights from other regions, the number of trees infested by MPB in north central Alberta is higher than in recent years. The Grande Prairie, Peace River, Slave Lake and Whitecourt regions are the most heavily impacted. This latest dispersal will not change Alberta's strategy for managing MPB infestations. Alberta's priorities continue to be to limit the spread of MPB infestations along the eastern slopes of the Rocky Mountains and to prevent MPB from spreading eastward into the boreal forest. However, there are many MPB infested trees in SLP's FMA and the potential for successful MPB mitigation in some areas is unlikely. Therefore, it is crucial to optimize merchantable coniferous fibre recovery from dead and endangered timber, maintain non pine stands for mid term timber supply and to ensure timely forest renewal. The Department expects activities over the next few years to be a combination of control (Level 1 and 2) where possible, prevention (Pine Strategy) and fibre recovery. This combination of actions will promote successful forest renewal on SLP's FMA. The operational changes necessary to accomplish these activities will be addressed through annual operating plans.

#### 4.0 Habitat for Species of Special Concern (Grizzly Bear Habitat)

Alberta's Grizzly Bear Recovery Plan (GBRP) recognizes that reduced grizzly bear survival and reproductive success is linked to human activity in priority habitats. Access development increases this activity. The Department is developing an implementation plan for the GBRP. When this is published the Company shall address these requirements in its operational plans.

The Company used the Foothills Model Forest Grizzly Bear Model to assess the impact of its plan on grizzly bear habitat. Forests can be managed for MPB and meet the intent of the GBRP. Regenerating forests (8 to 42 years) support increased numbers of forage plants, depending on the silvicultural treatments used. The Company can act to make roads impassable and to quickly reclaim access into completed compartments. Operational planning can mitigate many of the impacts of timber harvest. SLP is encouraged to ensure its structure retention targets meet or exceed the 1% minimum that is currently identified within the MPB amendment. SLP is further encouraged to practice integrated land management with respect to access with the oil and gas industry to minimize the associated negative effects on grizzly bears.

#### 5.0 Water Yield

SLP assessed the impact of its FMP on the watersheds in the FMA. Water yield modelling was completed for 20 years between 2009 and 2028. SLP's assessment did not include peak flows or hydrologic recovery equivalent clearcut area (ECA) values. The water yield results show future changes are less than 15% and within the range of natural variation with the exception of a portion of the Freeman River watershed which was greater than 15%. The high response within the Freeman River watershed is not a major concern because most of the watershed is located outside the FMA. Given existing regulations and operating ground rules, no

long-term adverse impacts on water quality and aquatic habitat are expected. These are acceptable outcomes from the planned operations.

#### 6.0 Long Term Fibre Sustainability

The MPB amendment increases the sustainable harvest levels for coniferous and deciduous timber. Both harvest levels are acceptable for the FMU. An increase in coniferous harvest from 586,378 m³ to 836,816 m³ is planned for a 15 year period from 2009 to 2024, followed by a reduction to 518,514 m³ per year for the remainder of the planning horizon. This increased coniferous harvest level reduces the area of MPB susceptible pine in the FMA by accelerating the harvest of susceptible stands. The deciduous harvest level increases from 541,021 m³ to 562,111 m³.

Reconciliation volumes for all coniferous timber quota holders from the 2002-2006 quadrant were not incorporated into the timber supply analysis (TSA) completed by the Company. Separate sensitivity analyses were completed to assess the timber supply impact of adding reconciliation volume. Reconciliation volume is included in the Periodic Allowable Cut (PAC) and Quadrant Authorized Allowable Cut (QAAC) tables.

Reconciliation volumes from the 2002-2006 quadrant shall be harvested in the 2006-2011 quadrant.

#### 7.0 Pine Strategy Implementation

The Department recognizes that uncertain economic conditions may limit the Company's ability to fully implement the Pine Strategy. The Company has developed a rational and feasible FMP amendment that achieves a significant reduction in MPB susceptible pine on its management area. On-going and timely communication with local government staff is essential to manage the issues identified, and those yet to be identified.

The implementation of the Pine Strategy does not guarantee the prevention of future outbreaks in the near term; however, it will create a forest that is more resistant to such outbreaks in the future. In the Slave Lake area, on-going monitoring will determine the priority and timing of timber salvage operations. Alberta will work with the Company to ensure the strategies address the outbreak and minimize the socio-economic and environmental impacts.

#### **8.0 Embedded Timber Operators**

SLP has reached general agreement with all the embedded timber operators and the Department regarding annual allowable cut (AAC) sharing. Tables 2 and 7 present the approved AACs for the FMU and each operator.

#### 9.0 Spatial Harvest Sequence

The mapped SHS is the most important output of the FMP amendment as it implements the strategies the companies must follow to achieve the predicted future forest condition. While dependent on many factors, the future forest condition is strongly influenced by harvest patterns, intensity and schedules. It presents spatially and temporally how the integration of environmental, economic and social values will be achieved on the FMA. Adherence to a properly planned harvest sequence is imperative to achieving the predicted future forest. SLP commits to following the SHS and tracking variance.

Alberta requires companies to prepare a 20-year SHS, with stands identified by operator for the first 10 years. SLP produced a 20-year SHS, with stands identified by operator for the first 15 years. SLP has not reached general agreement with all of the embedded timber operators and the Department regarding operational sequencing. The first 10-year SHS is approved but further work is required to ensure the 10-year SHS is operationally feasible.

The SHS for this MPB amendment incorporates land-use updates to November 14, 2008. The SHS is effective beginning May 1, 2009.

Forest Management Branch recognizes that SLP and the embedded quota holders may have to draw from the 11 - 20 year SHS prior to submission of the next FMP in 2019.

The following is required:

#### **Approval Condition 9.1 – Spatial Harvest Sequence**

- i. SLP shall develop an operationally feasible 20-year SHS by September 30, 2010. Timber operators must be identified for all stands scheduled for harvest in this SHS.
- ii. SLP shall follow the mapped 10-year harvest sequence as presented in the MPB amendment.
- iii. To address operational planning concerns, all timber disposition holders are authorized to modify the SHS by deleting no more than 20% of the total sequenced area in each compartment by decade, while harvesting no more than 100% of the total area within the SHS by compartment, by decade.
- iv. Preference should be given to selecting stands from the second 10-year period of the SHS (years 2019-2028) when replacing deleted stands (from iii above). Where this is not feasible, replacements may be from any other stands identified in the approved net landbase of the FMP, with priority given to pine stands that are ranked highly susceptible to MPB infestations.
- v. Where timber operators exceed the variance described in (iii), the Area Manager may require the completion of a compartment assessment and the Senior Manager, Forest Planning Section may recommend the adjustment of the approved AAC to reflect the impact of the variance.

- vi. The Department requires the variance from the SHS to be reported annually, and the 5-year Stewardship Report to analyze the variance from the SHS.
- vii. The Department will generally not request a modification of the approved harvest sequence for the first 15 years of the planning period unless required by a change in legislation or a policy approved by the Minister.
- viii. The Department will appraise all Final Harvest Plans submitted under the 2009 MPB amendment until all operators have operationalized the SHS to the satisfaction of the Minister.

#### 10.0 Public and First Nations Consultation

SLP is encouraged to continue its efforts to conduct meaningful public, stakeholder and First Nations involvement and keep them advised of its operational plans and accomplishments in addressing the MPB situation throughout the implementation of the MPB amendment.

#### **Approval Condition 10.1 Public Consultation**

i. SLP shall keep written documentation of all issues and comments raised by the public as well as the Company's responses to address the concerns.

#### **Approval Condition 10.2 First Nations Consultation**

- i. SLP shall adhere to Alberta's First Nations Consultation Guidelines on Land Management and Resource Development for operational plan development and approvals.
- ii. SLP shall document its consultation efforts and activities, issues raised and company responses. This documentation shall be made available to the Department upon request.

#### 11.0 Alberta Regeneration Information System Validation

i. As identified in SLP's May 7, 2009 Agreement-in-Principle letter, harvest area overlaps shall be reconciled and Alberta Regeneration Information System (ARIS) records adjusted accordingly by April 30, 2010.

#### 12.0 Performance Monitoring and Reporting

The effective implementation of the Pine Strategy throughout Alberta is very important, and timely information is vital to ensuring the best decisions are made and the most appropriate management strategies are developed. Considering this, the Department requires Pine Strategy progress reports to be prepared to keep the Department, other agencies and the public knowledgeable and current on the work completed. The Department will publish these requirements at a later date.

13.0 Authorization
The FMP amendment for FMA #900028 effective May 1, 2009 is approved as per the AACs presented in Tables 2 and 7.
The AACs are effective beginning May 1, 2009.
The next FMP shall be received by the Department in time for approval by April 30, 2019.
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**Table 1. Historical Coniferous Allocations and Annual Allowable Cuts** 

FMU	Company Name	Disposition	Landbase	Source	Cover Group /	Primary	<b>Primary Coniferous</b>	Total Approved
		Number	Management		Species	Disposition	AAC	$AAC (m^3)$
			Type			Allocation	$(\mathbf{m}^3)$	` ,
						(%)	15+/10/30 cm	
S20	Vanderwell Contractors (1971) Ltd.	CTQS200001	Single Combined	All-FMU	C, CD, DC, D	14.5775%	85,479	85,479
S20	Alberta Plywood Ltd.	CTQS200002	Single Combined	All-FMU	C, CD, DC, D	39.0600%	229,039	229,039
S20	Gordon Buchanan Enterprises Ltd.	CTQS200003	Single Combined	All-FMU	C, CD, DC, D	9.9625%	58,418	58,418
S20	Millar Western Forest Products Ltd.	CTQS200004	Single Combined	All-FMU	C, CD, DC, D	33.8225%	198,328	198,328
S20	Lakeshore Timber Company Ltd.	CTQS200005	Single Combined	All-FMU	C, CD, DC, D	1.8075%	10,599	10,599
S20	СТРР	CTPP	Single Combined	All-FMU	C, CD, DC, D		4,515	4,515
	FMU S20 Total						586,378	586,378

Notes: Previous effective date: May 1, 2002 Previous utilization: 15+/10/30 cm

**Table 2. Approved Coniferous Allocations and Annual Allowable Cuts** 

Effective Date: May 1, 2009

FMU	Company Name	Disposition	Landbase	Source	Cover Group /	Primary	<b>Primary Coniferous</b>	Total Approved
		Number	Management		Species	Disposition	AAC	$AAC (m^3)$
			Type			Allocation	$(m^3)$	` ,
						(%)	15+/10/30 cm	
S20	Vanderwell Contractors (1971) Ltd.	CTQS200001	Single Combined	All-FMU	C, CD, DC, D	14.5775%	121,987	121,987
S20	Alberta Plywood Ltd.	CTQS200002	Single Combined	All-FMU	C, CD, DC, D	39.0600%	326,860	326,860
S20	Gordon Buchanan Enterprises Ltd.	CTQS200003	Single Combined	All-FMU	C, CD, DC, D	9.9625%	83,368	83,368
S20	Millar Western Forest Products Ltd.	CTQS200004	Single Combined	All-FMU	C, CD, DC, D	33.8225%	283,032	283,032
S20	Lakeshore Timber Company Ltd.	CTQS200005	Single Combined	All-FMU	C, CD, DC, D	1.8075%	15,125	15,125
S20	СТРР	CTPP	Single Combined	All-FMU	C, CD, DC, D		6,444	6,444
	FMU S20 Total						836,816	836,816

#### Notes:

Reconciliation volumes totalling 395,716 m<sup>3</sup> are not included in the AAC. The reconciliation volumes have been added to the operational volume in PAC/QAAC Table 3.

Table 3. Coniferous Periodic Allowable and Quadrant Authorized Allowable Cuts

3.1	S20 V	Vand	derwell Contractor	rs (1971) Ltd.	Disposition:	CTQS200001			
			Quadrant Start	1-May-06	Quadrant End	30-Apr-11			
			_	Quadrant Segment End Date	Segment	Primary Approved Harvest Level (m³/yr)	Primary Quadrant Contribution (m <sup>3</sup> )	Total Quadrant Contribution (m <sup>3</sup> )	Notes
		1	1-May-06	30-Apr-08	2.0000000000	49,197	98,394.0000	98,394.0000	
		2	01-May-08	30-Apr-09		85,479	85,479.0000	85,479.0000	
		3	01-May-09	30-Apr-11	2.0000000000	121,987	243,974.0000	243,974.0000	3 3
			Quadrant Reconciliat	tion Volume (m <sup>3</sup> )			131,848	·	131,848 m <sup>3</sup> = 42,654 m <sup>3</sup> (Vanderwell 2002-2006 reconciliation volume) plus 89,194 m <sup>3</sup> (Millar Western & Vanderwell L1/S20 volume exchange).
			QAAC Total				559,695	559,695	
3.2	.2 S20 Alberta Plywood Ltd. Disposition: CTQS					CTQS200002			
			Quadrant Start	1-May-06	Quadrant End	30-Apr-11			
			Quadrant Segment Start Date	Quadrant Segment End Date	Years in Quadrant	Primary Approved Harvest Level (m³/yr)	Primary Quadrant Contribution (m <sup>3</sup> )	Total Quadrant Contribution (m <sup>3</sup> )	Notes
		1	1-May-06	_		229,039	687,117.0000	687,117.0000	
		2	01-May-09	1	2.0000000000	326,860	653,720.0000	653,720.0000	
			Quadrant Reconciliat	tion Volume (m <sup>3</sup> )			154,535		154,535 m <sup>3</sup> = Alberta Plywood 2002-2006 reconciliation volume.
			QAAC Total				1,495,372	1,495,372	
3.3	S20 (	Gord	lon Buchanan Ent	erprises Ltd.	Disposition:	CTQS200003			
			Quadrant Start	1-May-06	Quadrant End	30-Apr-11			
			_	1-May-06 Quadrant Segment End Date	Years in Quadrant	30-Apr-11  Primary Approved  Harvest Level  (m³/yr)	Primary Quadrant Contribution (m <sup>3</sup> )	Total Quadrant Contribution (m <sup>3</sup> )	Notes
		1	Quadrant Segment Start Date	Quadrant Segment End Date	Years in Quadrant Segment 3.00000000000	Primary Approved Harvest Level (m³/yr) 58,418	Contribution (m <sup>3</sup> ) 175,254.0000	Contribution (m <sup>3</sup> ) 175,254.0000	Notes
		1 2	Quadrant Segment Start Date 1-May-06 01-May-09	Quadrant Segment End Date 30-Apr-09 30-Apr-11	Years in Quadrant Segment	Primary Approved Harvest Level (m³/yr)	Contribution (m <sup>3</sup> ) 175,254.0000 166,736.0000	Contribution (m <sup>3</sup> ) 175,254.0000 166,736.0000	
		1 2	Quadrant Segment Start Date  1-May-06 01-May-09 Quadrant Reconciliat	Quadrant Segment End Date 30-Apr-09 30-Apr-11	Years in Quadrant Segment 3.00000000000	Primary Approved Harvest Level (m³/yr) 58,418	Contribution (m³)  175,254.0000  166,736.0000  142,228	Contribution (m³)  175,254.0000  166,736.0000  142,228	Notes  142,228 m <sup>3</sup> = Buchanan 2002-2006 reconciliation volume.
		1 2	Quadrant Segment Start Date 1-May-06 01-May-09	Quadrant Segment End Date 30-Apr-09 30-Apr-11	Years in Quadrant Segment 3.00000000000	Primary Approved Harvest Level (m³/yr) 58,418	Contribution (m <sup>3</sup> ) 175,254.0000 166,736.0000	Contribution (m³)  175,254.0000  166,736.0000  142,228	
3.4	S20 N		Quadrant Segment Start Date  1-May-06 01-May-09 Quadrant Reconciliat	Quadrant Segment End Date  30-Apr-09  30-Apr-11 tion Volume (m³)	Years in Quadrant Segment 3.0000000000 2.00000000000	Primary Approved Harvest Level (m³/yr) 58,418	Contribution (m³)  175,254.0000  166,736.0000  142,228	Contribution (m³)  175,254.0000  166,736.0000  142,228	
3.4	S20 N		Quadrant Segment Start Date  1-May-06 01-May-09 Quadrant Reconciliat QAAC Total	Quadrant Segment End Date  30-Apr-09 30-Apr-11 tion Volume (m³)  Products Ltd.	Years in Quadrant Segment 3.0000000000 2.00000000000	Primary Approved Harvest Level (m³/yr) 58,418 83,368	Contribution (m³)  175,254.0000  166,736.0000  142,228	Contribution (m³)  175,254.0000  166,736.0000  142,228	
3.4	S20 N		Quadrant Segment Start Date  1-May-06 01-May-09 Quadrant Reconciliat QAAC Total  ar Western Forest Quadrant Start	Quadrant Segment End Date  30-Apr-09 30-Apr-11 tion Volume (m³)  Products Ltd.	Years in Quadrant Segment  3.0000000000  2.0000000000  Disposition: Quadrant End Years in Quadrant	Primary Approved Harvest Level (m³/yr) 58,418 83,368 CTQS200004	Contribution (m³)  175,254.0000  166,736.0000  142,228	Contribution (m³)  175,254.0000  166,736.0000  142,228	
3.4	S20 N		Quadrant Segment Start Date  1-May-06 01-May-09 Quadrant Reconciliat QAAC Total  ar Western Forest Quadrant Start Quadrant Segment Start Date  1-May-06	Quadrant Segment End Date  30-Apr-09 30-Apr-11 tion Volume (m³)  Products Ltd.  1-May-06  Quadrant Segment End Date  30-Apr-08	Years in Quadrant Segment  3.0000000000  2.0000000000  Disposition: Quadrant End  Years in Quadrant Segment  2.00000000000	Primary Approved Harvest Level (m³/yr)  58,418 83,368  CTQS200004  30-Apr-11  Primary Approved Harvest Level (m³/yr)  234,610	Contribution (m³)  175,254.0000 166,736.0000 142,228 484,218  Primary Quadrant Contribution (m³) 469,220.0000	Contribution (m³)  175,254.0000 166,736.0000 142,228 484,218  Total Quadrant Contribution (m³) 469,220.0000	142,228 m <sup>3</sup> = Buchanan 2002-2006 reconciliation volume.
3.4	S20 N		Quadrant Segment Start Date  1-May-06 01-May-09 Quadrant Reconciliat QAAC Total  ar Western Forest Quadrant Start Quadrant Segment Start Date  1-May-06 01-May-08	Quadrant Segment End Date  30-Apr-09 30-Apr-11 tion Volume (m³)  Products Ltd.  1-May-06  Quadrant Segment End Date  30-Apr-08 30-Apr-08	Years in Quadrant Segment  3.00000000000  2.00000000000  Disposition: Quadrant End  Years in Quadrant Segment  2.00000000000  1.00000000000	Primary Approved Harvest Level (m³/yr)  58,418  83,368  CTQS200004  30-Apr-11 Primary Approved Harvest Level (m³/yr)  234,610  198,328	Contribution (m³)  175,254.0000 166,736.0000 142,228 484,218  Primary Quadrant Contribution (m³) 469,220.0000 198,328.0000	Contribution (m³)  175,254.0000 166,736.0000 142,228 484,218  Total Quadrant Contribution (m³)  469,220.0000 198,328.0000	142,228 m <sup>3</sup> = Buchanan 2002-2006 reconciliation volume.
3.4	S20 N		Quadrant Segment Start Date  1-May-06 01-May-09 Quadrant Reconciliat QAAC Total  ar Western Forest Quadrant Start Quadrant Segment Start Date  1-May-06	Quadrant Segment End Date  30-Apr-09 30-Apr-11 tion Volume (m³)  Products Ltd.  1-May-06  Quadrant Segment End Date  30-Apr-08 30-Apr-08	Years in Quadrant Segment  3.00000000000  2.00000000000  Disposition: Quadrant End  Years in Quadrant Segment  2.00000000000  1.00000000000	Primary Approved Harvest Level (m³/yr)  58,418 83,368  CTQS200004  30-Apr-11  Primary Approved Harvest Level (m³/yr)  234,610	Contribution (m³)  175,254.0000 166,736.0000 142,228 484,218  Primary Quadrant Contribution (m³) 469,220.0000	Contribution (m³)  175,254.0000 166,736.0000 142,228 484,218  Total Quadrant Contribution (m³) 469,220.0000	142,228 m <sup>3</sup> = Buchanan 2002-2006 reconciliation volume.  Notes
3.4	S20 N	Milla 1 2 3	Quadrant Segment Start Date  1-May-06 01-May-09 Quadrant Reconciliat QAAC Total  ar Western Forest Quadrant Segment Start Date  1-May-06 01-May-08 01-May-09 Quadrant Reconciliat	Quadrant Segment End Date  30-Apr-09 30-Apr-11 tion Volume (m³)  Products Ltd.  1-May-06  Quadrant Segment End Date  30-Apr-08 30-Apr-09 30-Apr-11	Years in Quadrant Segment  3.00000000000  2.00000000000  Disposition: Quadrant End  Years in Quadrant Segment  2.00000000000  1.00000000000	Primary Approved Harvest Level (m³/yr)  58,418  83,368  CTQS200004  30-Apr-11 Primary Approved Harvest Level (m³/yr)  234,610  198,328	Contribution (m³)  175,254.0000 166,736.0000 142,228 484,218  Primary Quadrant Contribution (m³)  469,220.0000 198,328.0000 566,064.0000 -40,379	Contribution (m³)  175,254.0000 166,736.0000 142,228 484,218  Total Quadrant Contribution (m³)  469,220.0000 198,328.0000 566,064.0000 -40,379	142,228 m <sup>3</sup> = Buchanan 2002-2006 reconciliation volume.
3.4	S20 N	Milla 1 2 3	Quadrant Segment Start Date  1-May-06 01-May-09 Quadrant Reconciliat QAAC Total  ar Western Forest Quadrant Start Quadrant Segment Start Date  1-May-06 01-May-08 01-May-09	Quadrant Segment End Date  30-Apr-09 30-Apr-11 tion Volume (m³)  Products Ltd.  1-May-06  Quadrant Segment End Date  30-Apr-08 30-Apr-09 30-Apr-11	Years in Quadrant Segment  3.00000000000  2.00000000000  Disposition: Quadrant End  Years in Quadrant Segment  2.00000000000  1.00000000000	Primary Approved Harvest Level (m³/yr)  58,418  83,368  CTQS200004  30-Apr-11 Primary Approved Harvest Level (m³/yr)  234,610  198,328	Contribution (m³)  175,254.0000 166,736.0000 142,228 484,218  Primary Quadrant Contribution (m³)  469,220.0000 198,328.0000 566,064.0000	Contribution (m³)  175,254.0000 166,736.0000 142,228 484,218  Total Quadrant Contribution (m³)  469,220.0000 198,328.0000 566,064.0000 -40,379	Notes  Notes $^3$ = Buchanan 2002-2006 reconciliation volume.  Notes $^3$ = 48,815 m <sup>3</sup> (2002-2006 reconciliation volume) - 89,194 m <sup>3</sup> (Millar Western &

3.5	S20	Lake	shore Timber Cor	npany Ltd.	Disposition:	CTQS200005			
-			Quadrant Start	1-May-06	Quadrant End	30-Apr-11			
			•	Quadrant Segment End Date	Years in Quadrant Segment	i Harvest Level	Primary Quadrant Contribution (m <sup>3</sup> )	Total Quadrant Contribution (m <sup>3</sup> )	Notes
		1	1-May-06	30-Apr-09	3.0000000000	10,599	31,797.0000	31,797.0000	
		2	01-May-09	30-Apr-11	2.0000000000	15,125	30,250.0000	30,250.0000	
	Quadrant Reconciliation Volume (m <sup>3</sup> )			ion Volume (m <sup>3</sup> )			7,484	7,484	7,484 m <sup>3</sup> = Lakeshore 2002-2006 reconciliation volume.
			QAAC Total				69,531	69,531	
3.6	S20	CTP	P		Disposition:	СТРР			
_			Quadrant Start	1-May-06	Quadrant End	30-Apr-11			
		Quadrant Segment Start Date  Quadrant Segment End Date		Ouadrant Segment	Years in Quadrant	Primary Approved	Primary Quadrant	Total Quadrant	
			Start Date	_	Segment	Harvest Level (m <sup>3</sup> /yr)	Contribution (m <sup>3</sup> )	Contribution (m <sup>3</sup> )	Notes
		1	Start Date 1-May-06	End Date	ŭ	_		,	Notes
		1 2		End Date 30-Apr-09	ŭ	$(m^3/yr)$	Contribution (m <sup>3</sup> )	Contribution (m <sup>3</sup> )	Notes
		1 2	1-May-06	30-Apr-09 30-Apr-11	3.0000000000	(m³/yr) 4,515	Contribution (m <sup>3</sup> ) 13,545.0000	Contribution (m <sup>3</sup> ) 13,545.0000	Notes

Table 4. Slave Lake Pulp Corporation FMA Coniferous Chargeability Effective Date: May 1, 2009

FMU	<b>Company Name</b>	Disposition Number	Coniferous Species Used in AAC	Species NOT Chargeable to AAC	Rights to Species NOT Chargeable to AAC	Structure Retention (%) Accounted for in AAC	Net Landbase Deletions and Deferrals	Net Landbase Deletions and Deferrals: Rights to Timber	Industrial Salvage Chargeability Strategy
All dispo	sitions and FMUs (unless otherwise noted)		All except Lt	N/A	N/A	Structure retention is AAC chargeable	Appendix 3, Table 7, Page 15 of MPB Amendment	N/A	1.2% AAC reduction for industrial salvage. Refer to 2003 DFMP Approval Decision and/or 2009 MPB Amendment Table 15, Page 32 for further details.

Table 5. Slave Lake Pulp Corporation FMA Coniferous Utilization Effective Date: May 1, 2009

						Utilization used to determine Harvest Level in PFMS			Operational Utilization				
<b>FMU</b>	Company Name	Disposition	AAC Type	Cover Group /	Top	Stump	Minimum	Stump	Top	Stump	Minimum	Stump	Coniferous Harvest
		Number		Species	Diameter	Diameter	Length	Height	Diameter	Diameter	Length	Height	Level (m³/yr) based on
					(cm)	(cm)	( <b>m</b> )	(cm)	(cm)	(cm)	( <b>m</b> )	/	<b>Operational Utilization</b>
All dispo	sitions, FMUs and AAC types (unless otherw	wise noted)	All	C, CD, DC, D	10	15	2.44	30	N/A	N/A	N/A	N/A	N/A

**Table 6. Historical Deciduous Allocations and Annual Allowable Cuts** 

FMU	Company Name	Disposition	Landbase	Source	Cover Group /	Primary Deciduous	Total Approved
		Number	Management		Species	AAC	$AAC (m^3)$
			Type			$(m^3)$	
						15+/10/30 cm	
S20	Slave Lake Pulp Corporation	FMA9000028	Single Combined	FMA-Only	C, CD, DC, D	530,201	530,201
S20	Lakeshore Timber Company Ltd.	DTAS200001	Single Combined	All-FMU	C, CD, DC, D	7,775	7,775
S20	СТРР	СТРР	Single Combined	All-FMU	C, CD, DC, D	3,045	3,045
	FMU S20 Total					541,021	541,021

Notes: Previous effective date: May 1, 2002 Previous utilization: 15+/10/30 cm

Table 7. Approved Deciduous Allocations and Annual Allowable Cuts Effective Date: May 1, 2009

<b>FMU</b>	<b>Company Name</b>	Disposition	Landbase	Source	Cover Group /	<b>Primary Deciduous</b>	Total Approved
		Number	Management		Species	AAC	$AAC (m^3)$
			Type			$(m^3)$	
						15+/10/30 cm	
S20	Slave Lake Pulp Corporation	FMA9000028	Single Combined	FMA-Only	C, CD, DC, D	550,869	550,869
S20	Lakeshore Timber Company Ltd.	DTAS200001	Single Combined	All-FMU	C, CD, DC, D	8,078	8,078
S20	СТРР	CTPP	Single Combined	All-FMU	C, CD, DC, D	3,164	3,164
	FMU S20 Total					562,111	562,111

Table 8. Deciduous Periodic Allowable and Quadrant Authorized Allowable Cuts

8.1	S20	Slav	e Lake Pulp Corpo	oration	Disposition:	FMA9000028				
-			Period Start: 15-Nov-05 P		Period End:	14-Nov-10				
			O .	Period Segment End Date	Commont	Primary Approved Harvest Level (m³/yr)	Primary PAC Contribution (m <sup>3</sup> )	Secondary PAC Contribution (m³)	Total PAC Contribution (m <sup>3</sup> )	Notes
		1	15-Nov-05	30-Apr-09	3.4575342466	530,201	1,833,188.1151	0.0000	1,833,188.1151	
		2	01-May-09	14-Nov-10	1.5424657534	550,869	849,696.5671	0.0000	849,696.5671	
			Periodic Reconciliati	on Volume (m3)			0	0	0	
			PAC Total				2,682,885	0	2,682,885	
8.2	S20	Lak	eshore Timber Con	npany Ltd.	Disposition:	DTAS200001				
			Quadrant Start	1-May-06	Quadrant End	30-Apr-11				
				Quadrant Segment End Date	Years in Quadrant	Primary Approved Harvest Level (m³/yr)	Primary Quadrant Contribution (m <sup>3</sup> )	• •	Total Quadrant Contribution (m <sup>3</sup> )	Notes
		1	1-May-06	30-Apr-09	3.0000000000	7,775	23,325.0000	0.0000	23,325.0000	
		2	01-May-09	30-Apr-11	2.0000000000	8,078	16,156.0000	0.0000	16,156.0000	
	Quadrant Reconciliation Volume (m3)				0	0	0			
			<b>QAAC Total</b>				39,481	0	39,481	
8.3	S20	CTF	PP		Disposition:	CTPP				
	520		Quadrant Start	1-May-06	Quadrant End	30-Apr-11				
			Quadrant Segment	Quadrant Segment	Years in Quadrant	Primary Annroyed	Primary Quadrant Contribution (m <sup>3</sup> )	Secondary Quadrant Contribution (m³)	Total Quadrant Contribution (m <sup>3</sup> )	Notes
		1	1-May-06	30-Apr-09	3.0000000000	3,045	9,135.0000	0.0000	9,135.0000	
		2	01-May-09	•	2.0000000000	3,164	6,328.0000	0.0000	6,328.0000	
			Quadrant Reconciliation Volume (m3)				0	0	0	
		QAAC Total					15,463	0	15,463	

Table 9. Slave Lake Pulp Corporation FMA Deciduous Chargeability Effective Date: May 1, 2009

FMU	Company Name	Disposition Number	Deciduous Species Used in AAC	Species NOT Chargeable to AAC	Rights to Species NOT Chargeable to AAC	Structure Retention (%) Accounted for in AAC	Net Landbase Deletions and Deferrals	Net Landbase Deletions and Deferrals: Rights to Timber	Industrial Salvage Chargeability Strategy
All dispo	ositions and FMUs (unless otherwise noted)		All	N/A	N/A	Structure retention is AAC chargeable	Appendix 3, Table 7, Page 15 of MPB Amendment	N/A	0.4% AAC reduction for industrial salvage. Refer to 2003 DFMP Approval Decision and/or 2009 MPB Amendment Table 15, Page 32 for further details.

# **Table 10. Slave Lake Pulp Corporation FMA Deciduous Utilization Effective Date: May 1, 2009**

					Utilizatio	n used to d Level in	letermine H PFMS	Iarvest	Operational Utilization			tion	
FMU	Company Name	Disposition	AAC Type	Cover Group /	Top	Stump	Minimum	Stump	Top	Stump	Minimum	Stump	Deciduous Harvest
		Number		Species	Diameter	Diameter	Length	Height	Diameter	Diameter	Length	Height	Level (m <sup>3</sup> /yr) based on
					(cm)	(cm)	( <b>m</b> )	(cm)	(cm)	(cm)	( <b>m</b> )	(cm)	Operational Utilization
All dispositions, FMUs And AAC Types (unless otherwise All			C, CD, DC, D	10	15	2.44	30	N/A	N/A	N/A	N/A	N/A	
noted)													

Table 11. Fiber Transfer Agreements within the Slave Lake Pulp Corporation FMA Area

Source Company	Source Dispositon Number	Transfer Type	Company Directed To	Species Group	Volume (m³/yr)	Comments
N/A	N/A	N/A	N/A	N/A	N/A	N/A