

**Forest Management Plan
Approval Decision**

**Forest Management Unit R13
Sundance Forest Industries
Edson, Alberta**

**Forest Management Agreement
#9700032**

Date: September 17, 2009

Effective: May 1, 2009

Approved by: (Original Signed by)
Robert W. Stokes, RPF
Acting Executive Director
Forest Management Branch
Forestry Division

Executive Summary

The Conditions herein are consistent with the terms of the Forest Management Agreement (FMA) and failure by Sundance Forest Industries Ltd.. (SFI) to fulfill the direction provided in this Approval Decision will place the Company in default of its FMA.

The Forest Management Plan (FMP) has been validated¹ by a Regulated Forestry Professional (RFP). The department recognizes RFP-validated work as complete, accurate, and prepared with professional due diligence. The FMP has been reviewed and approved by government RFPs.

Approval Decision Conditions

<i>Condition</i>	<i>Requirement</i>	<i>Approval Authority</i>	<i>Date</i>
<i>Approval Condition 6.1</i>	<i>Public Consultation</i>	<i>Senior Manager, Forest Planning Section</i>	<i>On-going</i>
<i>Approval Condition 6.2</i>	<i>First Nation Consultation</i>	<i>Senior Manager, Forest Planning Section</i>	<i>On-going</i>
<i>Approval Condition 7.1</i>	<i>Pine Strategy Performance Monitoring</i>	<i>Senior Manager, Forest Planning Section</i>	<i>On-going</i>
<i>Approval Condition 8.1</i>	<i>Spatial Harvest Sequence</i>	<i>Senior Manager, Forest Planning Section</i>	<i>On-going</i>
<i>Approval Condition 12.1</i>	<i>Stand Level Structure Retention</i>	<i>Senior Manager, Forest Planning Section</i>	<i>On-going</i>
<i>Approval Condition 15.1</i>	<i>Performance Monitoring and Reporting</i>	<i>Senior Manager, Forest Planning Section</i>	<i>November 1, 2014</i>
<i>Approval Condition 16.1</i>	<i>Non-Timber Assessments</i>	<i>Senior Manager, Forest Planning Section</i>	<i>On-going</i>
<i>Approval Condition 17.1</i>	<i>Future Forest Management Plans</i>	<i>Senior Manager, Forest Planning Section</i>	<i>April 30, 2017</i>

¹ Refer to the Alberta Forest Management Planning Standard, Annex 2 for professional validation requirements.

Approved Annual Allowable Cuts

The total Approved Annual Allowable Cut (AAC) for the FMA is 901,707 m³/yr. The coniferous AAC is 841,666 m³/yr and the deciduous AAC is 60,041 m³/yr.

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.

Authorization

This FMP replaces the approved SFI Forest Management Plan approved January 14, 2000.

The FMP (2007 Revised) for the SFI FMA area dated April 20, 2009 is approved subject to the Approval Conditions and the AAC presented in this Approval Decision.

The AAC are effective beginning May 1, 2009

The next FMP is due by April 30, 2017.

Table of Contents

Table of Contents	i
1.0 Introduction	1
2.0 Forest Management Planning Area	1
3.0 Background.....	1
4.0 Approval Decision Scope.....	1
5.0 Forest Management Plan	2
6.0 Public and First Nations Consultation.....	2
7.0 Mountain Pine Beetle	2
8.0 Spatial Harvest Sequence	3
9.0 Access.....	4
10.0 Water Yield	4
11.0 Habitat for Species of Special Concern (Grizzly Bear).....	4
12.0 Stand Level Structure Retention.....	5
13.0 Growth and Yield	5
14.0 Long Term Fibre Sustainability.....	6
15.0 Performance Monitoring and Reporting.....	6
16.0 Non-Timber Assessments.....	6
17.0 Future Forest Management Plans	7
18.0 Approved Annual Allowable Cuts	7
19.0 Embedded Timber Operators	7
20.0 Authorization.....	7
Table 1. Historical Coniferous Allocations and Annual Allowable Cuts	8
Table 2. Approved Coniferous Allocations and Annual Allowable Cuts	9
Table 3. Coniferous Periodic Allowable and Quadrant Authorized Allowable Cuts.....	10
Table 4. Sundance Forest Industries Ltd. FMA Coniferous Chargeability	12
Table 5. Sundance Forest Industries Ltd. FMA Coniferous Utilization.....	13
Table 6. Historical Deciduous Allocations and Annual Allowable Cuts	14
Table 7. Approved Deciduous Allocations and Annual Allowable Cuts.....	15
Table 8. Deciduous Periodic Allowable and Quadrant Authorized Allowable Cuts	16
Table 9. Sundance Forest Industries Ltd. FMA Deciduous Chargeability.....	17
Table 10. Sundance Forest Industries Ltd. FMA Deciduous Utilization	18
Table 11. Fibre Transfer Agreements within the Sundance Forest Industries Ltd. FMA Area	19

1.0 Introduction

The approval of forest management plans is the mandate of the Executive Director of the Forest Management Branch (FMB), Forestry Division of the Department of Sustainable Resource Development (department). This Approval Decision documents the rationale, and conditions of approval for Sundance Forest Industries Ltd. (SFI) Forest Management Plan (FMP) dated April 20, 2009.

The Conditions herein are consistent with the terms of the Forest Management Agreement (FMA) and failure by SFI to fulfill the direction provided in this Approval Decision will place the Company in default of its FMA. The Conditions contained herein are non-negotiable.

The FMP has been validated¹ by a Regulated Forestry Professional (RFP). The department recognizes RFP-validated work as complete, accurate, and prepared with professional due diligence. The FMP has been reviewed and approved by government RFPs.

2.0 Forest Management Planning Area

The area under consideration is the FMA area of SFI FMA #9700032 allocated to SFI via legislative Order-in-Council (O.C. 564/2007), dated May 1, 2008.

The FMA is located in West-central Alberta. The Upper Foothills, the Lower Foothills and to a lesser degree the Sub-Alpine and Alpine Natural Sub-regions cover the FMA. The forest management unit R13 is geographically separated into two operating areas: the Erith Operating Area in the north and the Elk River Operating area in the south.

In December 2008, the Alberta Land Use Framework 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 planning regions were identified of which the Upper Athabasca and the North Saskatchewan cover forest management unit R13.

3.0 Background

The department approved SFI's first FMP April 17, 2002. This FMP, prepared under the *Alberta Forest Management Planning Standard*, replaces the 2002 forest management plan and introduces new information used in planning, implementing and monitoring forestry operations on the FMA. This Approval Decision represents the culmination of the department's appraisal process.

4.0 Approval Decision Scope

This Approval Decision relates to the SFI FMP (2007 Revised) dated April 20, 2009. All timber operators within the FMA area (FMU R13) shall conduct their activities in accordance with the approved FMP and the conditions of this Approval Decision.

SFI shall meet the requirements (dates and content) of the Approval Decision conditions unless the Executive Director, Forest Management Branch, agrees to alternate requirements in writing.

In this Approval Decision **bolded text** identifies specific timelines, requirements and the department manager responsible for the review. Non-bolded text provides the rationale for the condition and specific considerations to be addressed in meeting the condition.

In the event of an inconsistency between the FMP, the Approval Decision and existing, new or revised legislation or regulation, the legislation or regulation shall apply.

5.0 Forest Management Plan

The Approval Conditions contained herein direct SFI to complete additional work to enhance the information presented. The department posts approved FMPs on its website for enhanced public access to plans. This does not release SFI from its obligations for making the FMP available to the public.

6.0 Public and First Nations Consultation

Approval Condition 6.1 – Public Consultation

- i. **SFI 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 6.2 First Nations Consultation

- i. **SFI shall adhere to *Alberta’s First Nations Consultation Guidelines on Land Management and Resource Development* for operational plan development and approvals. Further consultation is necessary with identified groups at operational plan development.**
- ii. **SFI shall document consultation efforts and activities, issues raised, and company responses. This documentation shall be made available to SRD upon request.**

7.0 Mountain Pine Beetle

Alberta experienced a significant mountain pine beetle (MPB) in-flight from British-Columbia during the summer of 2009. Due to severe drought conditions, attacked trees are already starting to die and change color in certain areas. Therefore, the impact of the in-flight will be known much earlier than the typical one-year timeframe in those locations. Alberta continues to implement its control strategies with respect to this outbreak and strategies to prevent future outbreaks. It is becoming apparent in Alberta that salvage strategies will become necessary in certain locations to address these outbreaks and to minimize the socio-economic and environmental impacts.

Recent reports indicate MPB have recently extended into FMU R13. The Company has developed a rational and feasible Pine Strategy Plan, as part of its FMP, which achieves a reduction in MPB susceptible pine in the managed portion of the Rank 1 and Rank 2 stands within its management area. On-going and timely communication with local departmental staff is essential to manage the issues identified, and those yet to be identified. SFI is encouraged to continue its efforts to keep the public and stakeholders advised of its operational plans and accomplishments in addressing the MPB situation.

All appropriate steps to limit the extent of the current outbreak are crucial, which means that execution of control activities (Level 1 and Level 2) takes priority over the spatial sequence. It is most likely that activities over the next few years will be a combination of control and prevention, and changes to the sequence necessary to do both will be handled through the annual operating plan. The implementation of the Pine Strategy does not guarantee the prevention of an outbreak in the near future, but in twenty years, will create a forest that is more resistant to such outbreaks.

Approval Condition 7.1 – Pine Strategy 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 will require 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.

- i. SFI will prepare summary reports on the FMP Pine Strategy implementation, from time to time, at the department's request.**

8.0 Spatial Harvest Sequence

The spatial (mapped) harvest sequence (SHS) is the most important output of the FMP 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 forecasted future forest. The department recognizes that changes to the SHS will be required to manage future mountain pine beetle infestations as they are found. SFI commits to following the SHS and tracking variance.

The following is required:

Approval Condition 8.1 – Spatial Harvest Sequence

- i. SFI shall follow the mapped 20-year harvest sequence as presented in the FMP.**
- ii. 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.**

a. Preference should be given to selecting stands from the second 10-year period of the SHS (years 2017-2026) when replacing deleted stands (from ii 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.

iii. Where timber operators exceed the variance described in (ii), 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.

iv. 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.

v. 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.

9.0 Access

A Road Corridor Plan is presented for accessing operating compartments during harvesting operations. Access is essential to the management of MPB and the impacts will be mitigated with SFI's continued good planning, effective construction, timely reclamation, and reforestation. The plan is reasonable and implements the FMP efficiently.

10.0 Water Yield

A Policy for Resource Management of the Eastern Slopes identifies watershed management as being of key importance to this area. SFI assessed the impact of its FMP on the watersheds in the FMA. Hydrologic recovery, averaged 14 years for all watersheds, with minimum and maximum values of 0-41 years. I consider the forecasted water yield and peak flow increases as small to moderate in magnitude and duration. Given existing regulations and operating ground rules are followed, no long-term adverse impacts on water quality and aquatic habitat are expected. These are acceptable outcomes from the planned operations.

11.0 Habitat for Species of Special Concern (Grizzly Bear)

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 tested 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. Access, however, is difficult to restrict once routes are built but the government must take a solid stance on this issue

in priority habitats. 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.

12.0 Stand Level Structure Retention

Throughout the province, forest industries practice green tree retention within harvested areas to create residual stand structure. A variety of approaches and retention targets have been approved in FMPs with the view that the result will be a range of forest conditions that when assessed will enable a refinement of future targets. SFI proposes an average of 1.5% of the volume harvested within each compartment group and the FMA area is retained as residual structure patches.

The strategy applies to all operators on the FMA and I support the single integrated approach for both implementation and monitoring.

I agree with this reasonable and practical approach to stand level structure retention and encourage the SFI to continue to investigate options for achieving the desired result while reducing the associated costs.

The following applies:

Approval Condition 12.1 – Stand Level Structure Retention

- i. All operators on the FMA will plan and carry out their operations to achieve the FMP structure retention target. Species composition and timber profile of the original stand conditions shall be retained for the merchantable component to achieve acceptable biodiversity results.**
- ii. Merchantable volume retained for structure is chargeable as AAC production and shall be reconciled every five years at the end of each cut control period.**

13.0 Growth and Yield

A credible Growth and Yield Program gathers key information to use in future timber supply analyses and monitors and verifies FMP timber yield assumptions. SFI efforts in developing this Growth and Yield (G & Y) plan is recognized and appreciated. The FMP indicates a new inventory will be completed in 2017, in time for SFI's next FMP.

- i. The new inventory may identify changes to the proportion of cover groups (e.g. pure versus mixedwood) and hence yield strata designations would also change. Adjustments to the G & Y plan may be required once the inventory is completed if there is any significant growth and yield related data gaps.**

14.0 Long Term Fibre Sustainability

The coniferous fibre flow of 841,666 m³/yr proposed for 10 years in the MPB Preferred Scenario is acceptable. Equally acceptable is the long term even-flow harvest level of 420,670 m³/yr. Due to the extensive tracts of mature pine, full implementation of Alberta's Pine Strategy would require SFI to incorporate 69% of the managed landbase into its strategy. Addressing the vast areas of mature pine on this FMA will take many planning cycles. The Company further refined the selection of stands classified as Rank 1 and Rank 2 under the provincial classification as a harvesting priority. This breaks up the contiguous pine forest within the FMU and is acceptable and implements the Pine Strategy effectively.

15.0 Performance Monitoring and Reporting

Annual Reports and 5-year Stewardship Reports are used to monitor the successful implementation of FMPs.

Approval Condition 15.1 – Performance Monitoring

i) SFI shall submit Annual Reports and Stewardship Reports that document the operational performance of the Company's activities in implementing the FMP. Where variances from the planned outcomes exist, an analysis shall discuss the reason for the variance and the Company's corrective action taken or proposed.

ii) A Stewardship Report acceptable to the Senior Manager, Forest Planning Section shall be submitted by November 1, 2014.

16.0 Non-Timber Assessments

SRD has been working with the Forest Industry Sustainability Committee (FISC) to allocate responsibility for the non-timber forest analysis required by the *Alberta Forest Management Planning Standard, Version 4.1 – April 2006* in forest management planning. The outcome of these discussions was an agreement that SRD would complete the Coarse-filter biodiversity assessments; Fine-filter wildlife habitat modeling; Wildfire threat analysis; and Watershed analysis.

FMB is currently working to develop protocols that will be used to complete these analyses. FMB will work with each Company as FMPs are developed to ensure these assessments address the management objectives/issues specific to each FMA and align with Company objectives.

Approval Condition 16.1 – Non-Timber Assessments

i. Following the completion of non-timber assessments (Coarse-filter biodiversity assessments, Fine-filter wildlife habitat modeling, Wildfire threat analysis), the Plan Development Team (PDT) shall be reconvened to review the results of these non-timber assessments and address any necessary changes to the SHS.

17.0 Future Forest Management Plans

In accordance with the Forest Management Agreement and the MPB approval decision, SFI will submit a plan in 8 years, barring significant events on the FMA, or changes in policy.

Approval Condition 17.1 – Future Forest Management Plans

- i. SFI shall complete a FMP that meets the forest management planning standards and it shall be received by the department in time for approval by April 30, 2017, unless otherwise approved by the minister.**

18.0 Approved Annual Allowable Cuts

The total AAC for the FMA is 901,707 m³/yr. The coniferous AAC is 841,666 m³/yr and the deciduous AAC is 60,041 m³/yr.

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.

19.0 Embedded Timber Operators

Sundance Forest Industries Ltd. has consulted with the embedded timber operators and the department regarding operational sequencing and AAC sharing. Tables 2 and 7 present the approved AACs for each operator based on their disposition allocations.

20.0 Authorization

The FMP (2007 Revised) for FMU R13 dated April 20, 2009 is approved as per the AAC presented in Table 2 and Table 7.

The AAC are effective beginning May 1, 2009

Table 1. Historical Coniferous Allocations and Annual Allowable Cuts

FMU	Company Name	Disposition Number	Landbase Management Type	Source	Cover Group / Species	Primary Disposition Allocation (%)	Primary Coniferous AAC (m ³) 15/11/15	Total Approved AAC (m ³)
R13	<i>Sundance Forest Industries Ltd.</i>	<i>FMA9700032</i>	<i>Single Combined</i>	<i>All-FMU</i>	<i>C, CD, DC, D</i>		<i>791,153</i>	<i>791,153</i>
R13		<i>Local Use</i>	<i>Single Combined</i>	<i>All-FMU</i>	<i>C, CD, DC, D</i>		<i>3,976</i>	<i>3,976</i>
R13	FMA AAC Subtotal	FMA9700032	Single Combined	All-FMU	C, CD, DC, D		795,129	795,129
R13	Precision Forest Industries Ltd.	CTQR130001	Single Combined	All-FMU	C, CD, DC, D	0.4600%	3,872	3,872
R13	Medicine Lodge Timber Products Ltd.	CTQR130002	Single Combined	All-FMU	C, CD, DC, D	1.9200%	16,160	16,160
R13	Tall Pine Timber Co. Ltd.	CTQR130003	Single Combined	All-FMU	C, CD, DC, D	0.1600%	1,347	1,347
R13	Edson Community Harvesting Operations Ltd.	CTQR130004	Single Combined	All-FMU	C, CD, DC, D	1.7791%	14,974	14,974
R13	CTPP	CTPP	Single Combined	All-FMU	C, CD, DC, D		10,184	10,184
FMU R13 Total							841,666	841,666

Notes:
 Effective May 1, 2007
 CTQR130004 - 14,974 m³/yr derived as 0.9400% of the FMU AAC and 7,062 m³/yr fixed volume.

Table 2. Approved Coniferous Allocations and Annual Allowable Cuts

Effective Date: May 1, 2009

FMU	Company Name	Disposition Number	Landbase Management Type	Source	Cover Group / Species	Primary Disposition Allocation (%)	Primary Coniferous AAC (m ³) 15/11/15	Total Approved AAC (m ³)
R13	Sundance Forest Industries Ltd.	FMA9700032	Single Combined	All-FMU	C, CD, DC, D		791,153	791,153
R13		Local Use	Single Combined	All-FMU	C, CD, DC, D		3,976	3,976
R13	FMA AAC Subtotal	FMA9700032	Single Combined	All-FMU	C, CD, DC, D		795,129	795,129
R13	Precision Forest Industries Ltd.	CTQR130001	Single Combined	All-FMU	C, CD, DC, D	0.4600%	3,872	3,872
R13	Medicine Lodge Timber Products Ltd.	CTQR130002	Single Combined	All-FMU	C, CD, DC, D	1.9200%	16,160	16,160
R13	Tall Pine Timber Co. Ltd.	CTQR130003	Single Combined	All-FMU	C, CD, DC, D	0.1600%	1,347	1,347
R13	Edson Community Harvesting Operations Ltd.	CTQR130004	Single Combined	All-FMU	C, CD, DC, D	1.7791%	14,974	14,974
R13	CTPP	CTPP	Single Combined	All-FMU	C, CD, DC, D		10,184	10,184
FMU R13 Total							841,666	841,666

Notes:

CTQR130004 - 14,974 m³/yr derived as 0.9400% of the FMU AAC and 7,062 m³/yr fixed volume.

Table 3. Coniferous Periodic Allowable and Quadrant Authorized Allowable Cuts

3.1	R13	Sundance Forest Industries Ltd.	Disposition: FMA9700032					
	Period Start: 14-Jan-07		Period End: 30-Apr-12					
		Period Segment Start Date	Period Segment End Date	Years in Period Segment	Primary Approved Harvest Level (m³/yr)	Primary PAC Contribution (m³)	Total PAC Contribution (m³)	Notes
	1	14-Jan-07	30-Apr-07	0.2931506849	402,266	117,924.5534	117,924.5534	
	2	01-May-07	30-Apr-12	5.0000000000	795,129	3,975,645.0000	3,975,645.0000	
	Periodic Reconciliation Volume (m3)					-179,318	-179,318	
PAC Total					3,914,252	3,914,252		
3.2	R13	Precision Forest Industries Ltd.	Disposition: CTQR130001					
	Quadrant Start 1-May-07		Quadrant End 30-Apr-12					
		Quadrant Segment Start Date	Quadrant Segment End Date	Years in Quadrant Segment	Primary Approved Harvest Level (m³/yr)	Primary Quadrant Contribution (m³)	Total Quadrant Contribution (m³)	Notes
	1	1-May-07	30-Apr-12	5.0000000000	3,872	19,360.0000	19,360.0000	
	Quadrant Reconciliation Volume (m3)					-734	-734	
	QAAC Total					18,626	18,626	
3.3	R13	Medicine Lodge Timber Products Ltd.	Disposition: CTQR130002					
	Quadrant Start 1-May-07		Quadrant End 30-Apr-12					
		Quadrant Segment Start Date	Quadrant Segment End Date	Years in Quadrant Segment	Primary Approved Harvest Level (m³/yr)	Primary Quadrant Contribution (m³)	Total Quadrant Contribution (m³)	Notes
	1	1-May-07	30-Apr-12	5.0000000000	16,160	80,800.0000	80,800.0000	
	Quadrant Reconciliation Volume (m3)					0	0	
	QAAC Total					80,800	80,800	
3.4	R13	Tall Pine Timber Co. Ltd.	Disposition: CTQR130003					
	Quadrant Start 1-May-07		Quadrant End 30-Apr-12					
		Quadrant Segment Start Date	Quadrant Segment End Date	Years in Quadrant Segment	Primary Approved Harvest Level (m³/yr)	Primary Quadrant Contribution (m³)	Total Quadrant Contribution (m³)	Notes
	1	1-May-07	30-Apr-12	5.0000000000	1,347	6,735.0000	6,735.0000	
	Quadrant Reconciliation Volume (m3)					0	0	
	QAAC Total					6,735	6,735	

3.5	R13	Edson Community Harvesting Operations Ltd.	Disposition: CTQR130004				
	Quadrant Start 1-May-07		Quadrant End 30-Apr-12				
	Quadrant Segment Start Date	Quadrant Segment End Date	Years in Quadrant Segment	Primary Approved Harvest Level (m³/yr)	Primary Quadrant Contribution (m³)	Total Quadrant Contribution (m³)	Notes
	1-May-07	30-Apr-12	5.0000000000	14,974	74,870.0000	74,870.0000	
	Quadrant Reconciliation Volume (m3)				0	0	
QAAC Total				74,870	74,870		

3.6	R13	CTPP	Disposition: CTPP				
	Quadrant Start 1-May-07		Quadrant End 30-Apr-12				
	Quadrant Segment Start Date	Quadrant Segment End Date	Years in Quadrant Segment	Primary Approved Harvest Level (m³/yr)	Primary Quadrant Contribution (m³)	Total Quadrant Contribution (m³)	Notes
	1-May-07	30-Apr-12	5.0000000000	10,184	50,920.0000	50,920.0000	
	Quadrant Reconciliation Volume (m3)				0	0	
QAAC Total				50,920	50,920		

Table 4. Sundance Forest Industries Ltd. FMA Coniferous Chargeability
Effective Date: May 1, 2009

FMU	Company Name	Disposition Number	Coniferous Species Used in AAC	Species NOT Chargeable to AAC	Rights to Species NOT Chargeable to AAC	Structure Retention (%)	Structure Retention (%) Accounted for in AAC	Net Landbase Deletions and Deferrals	Net Landbase Deletions and Deferrals: Rights to Timber	Industrial Salvage Chargeability Strategy
All dispositions and FMUs (unless otherwise noted)			Fb, Pl, Sw, Sb	n/a	n/a	1.50%	Structure retention is AAC chargeable	*Deletions: Section 6.2 of the Landbase document (pg. 59-61). *Minimal amount of Sb is being sequenced in short term. Noticeable portion of sequence is supported by Sb at end of first rotation. Figure 5.2, p.32 of the TSA document.	Sundance FMA	All industrial salvage volumes are AAC chargeable.

Table 5. Sundance Forest Industries Ltd. FMA Coniferous Utilization
Effective Date: May 1, 2009

FMU	Company Name	Disposition Number	AAC Type	Cover Group / Species	Utilization used to determine Harvest Level in PFMS				Operational Utilization				
					Top Diameter (cm)	Stump Diameter (cm)	Minimum Length (m)	Stump Height (cm)	Top Diameter (cm)	Stump Diameter (cm)	Minimum Length (m)	Stump Height (cm)	Coniferous Harvest Level (m ³) based on Operational Utilization
All dispositions and FMUs (unless otherwise noted)			Primary	C, CD, DC, D	11	15	3.84	15	n/a	n/a	n/a	n/a	n/a

Table 6. Historical Deciduous Allocations and Annual Allowable Cuts

FMU	Company Name	Disposition Number	Landbase Management Type	Source	Cover Group / Species	Primary Deciduous AAC (m³) 15/10/15	Total Approved AAC (m³)
<i>R13</i>	<i>Sundance Forest Industries Ltd.</i>	<i>FMA9700032</i>	<i>Single Combined</i>	<i>All-FMU</i>	<i>C, CD, DC, D</i>	<i>52,661</i>	<i>52,661</i>
<i>R13</i>		<i>Local Use</i>	<i>Single Combined</i>	<i>All-FMU</i>	<i>C, CD, DC, D</i>	<i>265</i>	<i>265</i>
R13	FMA AAC Subtotal	FMA9700032	Single Combined	All-FMU	C, CD, DC, D	52,926	52,926
R13	CTPP	CTPP	Single Combined	All-FMU	C, CD, DC, D	7,115	7,115
FMU R13 Total						60,041	60,041

Notes:
Effective May 1, 2007

Table 7. Approved Deciduous Allocations and Annual Allowable Cuts

Effective Date: May 1, 2009

FMU	Company Name	Disposition Number	Landbase Management Type	Source	Cover Group / Species	Primary Deciduous AAC (m ³) 15/10/15	Total Approved AAC (m ³)
R13	<i>Sundance Forest Industries Ltd.</i>	<i>FMA9700032</i>	<i>Single Combined</i>	<i>All-FMU</i>	<i>C, CD, DC, D</i>	<i>52,661</i>	<i>52,661</i>
R13		<i>Local Use</i>	<i>Single Combined</i>	<i>All-FMU</i>	<i>C, CD, DC, D</i>	<i>265</i>	<i>265</i>
R13	FMA AAC Subtotal	FMA9700032	Single Combined	All-FMU	C, CD, DC, D	52,926	52,926
R13	CTPP	CTPP	Single Combined	All-FMU	C, CD, DC, D	7,115	7,115
FMU R13 Total						60,041	60,041

Table 8. Deciduous Periodic Allowable and Quadrant Authorized Allowable Cuts

8.1	R13	Sundance Forest Industries Ltd.		Disposition: FMA9700032				
		Period Start: 14-Jan-07		Period End: 30-May-12				
		Period Segment Start Date	Period Segment End Date	Years in Period Segment	Primary Approved Harvest Level (m³/yr)	Primary PAC Contribution (m³)	Total PAC Contribution (m³)	Notes
	1	14-Jan-07	30-Apr-07	0.2931506849	42,859	12,564.1452	12,564.1452	
	2	01-May-07	30-Apr-12	5.0000000000	52,926	264,630.0000	264,630.0000	
	Periodic Reconciliation Volume (m3)					-23,753	-23,753	
	PAC Total					253,441	253,441	
8.2	R13	CTPP		Disposition: CTPP				
		Quadrant Start 1-May-07		Quadrant End 30-Apr-12				
		Quadrant Segment Start Date	Quadrant Segment End Date	Years in Quadrant Segment	Primary Approved Harvest Level (m³/yr)	Primary Quadrant Contribution (m³)	Total Quadrant Contribution (m³)	Notes
	1	1-May-07	30-Apr-12	5.0000000000	7,115	35,575.0000	35,575.0000	
		Quadrant Reconciliation Volume (m3)					0	0
	QAAC Total					35,575	35,575	

Table 9. Sundance Forest Industries Ltd. 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 (%)	Structure Retention (%) Accounted for in AAC	Net Landbase Deletions and Deferrals	Net Landbase Deletions and Deferrals: Rights to Timber	Industrial Salvage Chargeability Strategy
All dispositions and FMUs (unless otherwise noted)			Aw, Bw, Pb	n/a	n/a	1.50%	Structure retention is AAC chargeable.	*Landbase deletions: see Section 6.2 of the Landbase document (pg. 59-61).	Sundance FMA	All industrial salvage volumes are AAC chargeable.

Table 10. Sundance Forest Industries Ltd. FMA Deciduous Utilization
Effective Date: May 1, 2009

FMU	Company Name	Disposition Number	AAC Type	Cover Group / Species	Utilization used to determine Harvest Level in PFMS				Operational Utilization				
					Top Diameter (cm)	Stump Diameter (cm)	Minimum Length (m)	Stump Height (cm)	Top Diameter (cm)	Stump Diameter (cm)	Minimum Length (m)	Stump Height (cm)	Deciduous Harvest Level (m ³) based on Operational Utilization
All dispositions and FMUs (unless otherwise noted)			Primary	C, CD, DC, D	10	15	2.49	15	n/a	n/a	n/a	n/a	n/a

Table 11. Fiber Transfer Agreements within the Sundance Forest Industries Ltd. FMA Area

Source Company	Source Dispositon Number	Transfer Type	Company Directed To	Species Group	Volume (m³/yr)	Comments
Sundance Forest Industries Ltd.	FMA9700032	FMA	Weyerhaeuser Company Limited	Coniferous	43,500	FMA clause 20.(1)