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Forest Harvest Plan

FMA 9100029

Planning Unit 097104



Alberta-Pacific
Forest Industries Inc.

Forest Harvest Plan

Planning Unit 097104

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Report

Introduction

Alberta – Pacific Forest Industries Inc. (Alberta – Pacific) submitted a Forest Harvest Plan (FHP) for the harvest of deciduous and coniferous stands within planning unit 097104 in late May of 2018. This plan was approved in early June.

This amendment updates the original planning unit 097104 due to an increase in the to the proposed mine site. Planning unit 097104 is located northeast of Fort McKay in the Surface Mineable Area (SMA) within Forest Management Unit (FMU) A15.

Copies of this Forest Harvest Plan are available on the Alberta – Pacific website, at www.alpac.ca

General Planning Unit Information /Design Considerations

This FHP has been validated by a Registered Forestry Professional of Alberta-Pacific Forest Industries Inc.

This FHP includes maps and reports that clearly show and document the planned harvest area boundaries, roads and water crossings within the Planning Unit.

This plan is being submitted for appraisal, for a 5-year FHP approval under the 2018 Alberta-Pacific Forest Industries Inc. (Alberta-Pacific) Annual Operating Plan (AOP).

Operating Ground Rules

Planning unit 097104 has been designed in accordance with the Northeast Alberta Operating Ground Rules (OGRs), revised 2014 and the operating principles identified in the 2017 Mineable Oil Sands Area (MOSA) plan. Alberta – Pacific is requesting deviations from the OGRs due to the impending mine development. These requests, along with corresponding information are listed under the applicable section and the OGR Deviations section.

Maps

Individual block maps have been included in the submission package, outlining the information pertinent to these blocks. A planning unit overview has been included in the submission package. This map can be viewed in the *Appendices* of this document.

Block Information

A *Block Summary Table* has been included below outlining the expected volumes of the harvest area.

Alberta – Pacific adheres to the 15/10 utilization standard for both deciduous stands, coniferous stands. Alberta- Pacific plans to complete cut-to-length operations for the coniferous volume within this planning unit to meet the needs of NFPL. These cut-to-length operations will adhere to the Alberta Log Scaling regulations and the Alberta Log Scaling Manual.

Field verification

The proposed blocks were ground verified by a field layout team in 2018. The layout team provided planning support to assess timber quality, sensitive and historical sites, operability of the harvest area, and classification of water courses within the Planning unit boundary. Where applicable, the findings of the layout team have been noted in the corresponding section of this report.

Understory Assessment

This area will be developed as a mine site within 5 years' time, consequently no understory assessments were conducted.

Block Summary

(Volumes rounded to whole numbers)

Coniferous Blocks						
<i>Source ID</i>	Opening Number	Harvest Season (Frozen/ Non-Frozen)	Area (ha)	Conifer Volume (m³)	Incidental Deciduous Volume (m³)	Total Volume (m³)
09710420641	4100972064	N	1.72	240	42	282
09710421721	4100972172	N	10.04	1373	45	1419
09710428241	4100972824	N	29.46	1277	4903	6180
09710429581	4100972958	F	22.49	1574	73	1647
09710433321	4100973332	F	7.71	459	14	473
09710434331	4100973433	N	4.83	397	127	524
09810411261	4100981126	N	26.43	2064	175	2239
09710420591	4100972059	F	57.96	4464	3622	8087
09710418241	4100971824	F	41.20	2437	1964	4402
09710428271	4100972827	N	106.11	8882	386	9268
09710436761	4100973676	N	184.84	23699	1208	24907
09710422541	4100972254	N	12.77	1564	191	1755
09810414231	4100981423	N	8.42	669	60	729
Total			513.97	49,100	12,813	61,913

Deciduous Blocks						
<i>Source ID</i>	Opening Number	Harvest Season (Frozen/ Non-Frozen)	Area (ha)	Deciduous Volume (m³)	Incidental Conifer Volume (m³)	Total Volume (m³)
09710407231	4100970723	N	95	6,982	3,677	10,659
09710417631	4100971763	N	122	27,670	1,801	29,471
09710418331	4100971833	N	8	2,134	95	2,229
09710418841	4100971884	N	108	25,194	786	25,980
09710418871	4100971887	N	13	1,367	558	1,924
09710419451	4100971945	N	149	37,528	1,231	38,760
09710419711	4100971971	N	55	7,735	2,444	10,179
09710429631	4100972963	F	16	2,027	712	2,740
09810415731	4100981573	N	14	2,721	307	3,027
09810423341	4100982334	N	12	2,484	346	2,830
Total			592	115,842	11,958	127,800

Table 1: Block Summary

This table provides a brief description of the proposed harvest blocks within the planning unit.

Structure Retention

No structure retention will be left due to the future mine development planned for this area.

Debris Management

Planning unit 097104 is situated within Alberta's Fire Control Zone number 40 as identified by Alberta Agriculture and Forestry (AAF).

Watercourse Protection

During the preliminary planning of planning unit 097104, potential watercourses were identified using wet areas mapping, LiDAR data, aerial imagery, as well as the available AVI data. The Fisheries and Wildlife Internet Mapping Tool (FWMIT) has confirmed the presence of fish bearing watercourses in the area. Alberta Pacific Forest Industries will conduct fish surveys of all watercourse crossings within the unit.

Where harvest blocks are in proximity to any potential watercourses, the field layout team conducted field assessments utilizing the methodology and classification standards outlined in Section 6.0 of the OGRs, Figure 1 and Table 1. In areas adjacent to watercourses where no erosion hazard will exist after harvest no watercourse buffers will be left.

Watercourse Crossing Summary Table

Road ID	Road Crossing Number	Road Season	Stream Class
RB09710407231	1291	N	EPHEMERAL
RB09710420591	2047	N	SMALL PERMANENT
RB09710420641	2063	N	SMALL PERMANENT

Table 2: Watercourse Crossing Summary

A list of inter-block road crossings over field verified watercourses within the planning unit.

Road Information

Overview maps have been attached showing roads in accordance with Section 3.4.6. of the OGRs; all spatial data requirements have also been included with this submission.

Roads in areas that may have potential for erosion will be reclaimed, all other roads will be left open to provide access for mine development activities.

Road Attributes Table

Source ID	Opening Number	Block Area (ha)	Operations (Conifer/Deciduous)	Harvest Season (Frozen/Non-Frozen)	Road Percentage
09710420641	4100972064	1.72	C	N	3.87
09710421721	4100972172	10.04	C	N	9.45
09710428241	4100972824	29.46	C	N	4.75
09710429581	4100972958	22.49	C	F	2.03
09710433321	4100973332	7.71	C	F	5.10
09710434331	4100973433	4.83	C	N	7.44
09810411261	4100981126	26.43	C	N	7.73
09710420591	4100972059	57.96	C	F	4.34
09710419711	4100971971	55.41	D	N	6.48
09710418241	4100971824	41.20	C	F	4.16
09710419451	4100971945	149.32	D	N	2.15
09710418331	4100971833	7.92	D	N	0.00
09710418871	4100971887	13.34	D	N	3.74
09710428271	4100972827	106.11	C	N	4.64
09710436761	4100973676	184.84	C	N	4.38
09710422541	4100972254	12.77	C	N	7.29
09710418841	4100971884	107.98	D	N	2.45
09710417631	4100971763	121.86	D	N	3.14
09710407231	4100970723	94.65	D	N	4.55
09710429631	4100972963	16.46	D	F	4.87
09810415731	4100981573	13.52	D	N	3.18
09810423341	4100982334	11.55	D	N	5.54
09810414231	4100981423	8.42	C	N	2.13

Table 3: Road Attributes: Summary of the proposed in-block roads of the planning unit.

*No road percentage has been calculated for this block as road percentage has been attributed to block 09710418241.

Land Use Information

Agreements

A search of the Land Status Automated System (LSAS) and Digital Integrated Dispositions (DIDs) yielded active dispositions within the FHP area. Any necessary agreements with the disposition holder will be in place prior to the commencement of harvest operations. None of the dispositions within the planning unit area will restrict harvest operations in the FHP.

Integration with Other Forest Users

Integration with Other Harvest Operators

Alberta-Pacific is the only operator within this planning unit, Northland Forest Products Ltd. has an active quota within FMU A15, this plan has been reviewed by Northland Forest Products Ltd. and they have no concerns.

Registered Fur Management Areas (RFMAs)

This harvest plan is in the initial phase of mine development for this area. Due to the development of the mine site and its effects within the planning unit, trapper notifications have been completed by Suncor Energy for this plan, including the notification of upcoming timber harvesting.

Trapper Areas Table

Wild Life Management Unit 530		
RFMA ID	Notification Method	Contact Method
2137	Suncor Energy	Various
2331	Suncor Energy	Various

Table 4: Trapper Areas Table
RFMA holders affected by harvest operations.

Wildlife Management Unit(s) (WMU)

Planning unit 097104 falls within WMU 530. The Guides and Outfitters operating within this unit have been sent notification, via registered mail, on the FHP design as well as a timeline for the commencement of harvest operations.

Guide and Outfitters Table

WildLife Management Unit 530		
OG ID	Date	Contact Method
1282 G	May 16, 2018	Registered Mail
295 G	May 16, 2018	Registered Mail
1212 G	May 16, 2018	Registered Mail
1247 G	May 16, 2018	Registered Mail
1215 G	May 16, 2018	Registered Mail
923 G	May 16, 2018	Registered Mail
344 G	May 16, 2018	Registered Mail
388 G	May 16, 2018	Registered Mail
401 GW	May 16, 2018	Registered Mail
1252 G	May 16, 2018	Registered Mail
453 GW	May 16, 2018	Registered Mail
1236 G	May 16, 2018	Registered Mail
1108 G	May 16, 2018	Registered Mail

Table 5: Guide and Outfitters
List of Guide and Outfitters active in 530

Indigenous Groups

During the General Development Plan (GDP) process, Alberta – Pacific completes a consultation with Indigenous groups every year as per the Government of Alberta Consultation Policy. Consultation was completed for the expanded area prior to this submission. There have not been any issues identified for the planning unit 097104 FHP submission.

Suncor Energy has also completed extensive consultation with local Indigenous Groups affected by this plan.

Other Forest Users

No other forest user groups have been identified through the development of this plan.

Species and Areas of Concern

A FWIMT report was generated May 14, 2018. The report identified 2 species of concern within this Planning Unit, Barred Owls and Barn Swallows. During the layout phase of this plan no nests or cavities were identified.

Suncor Energy has been required to leave a 250-meter buffer on the Athabasca River. This buffer contains large sized, old age timber. This buffer as well as exposed banks along the Athabasca River should provide suitable habitat for both species within this area.

A portion of this plan is within a Key Wildlife biodiversity zone (KWBZ), operations within the KWBZ will be conducted in accordance with Section 7.7.5.7 of the OGRs.

Sensitive Sites

A review of the block design and landscape of the FHP was completed by professional Archaeologists. Any sites identified as being of high historical significance (historical resource sites), have been removed from the harvest design.

Upon completion of cutblock and road layout, a second review of the harvest blocks, and temporary class 4 roads is completed to identify potential conflicts, and to determine if any further changes are required to the planning unit.

If any sites are identified post submission, Alberta – Pacific will take the appropriate action to protect these sites.

There were no rare plants identified, including significant areas of terrestrial lichen.

Forest Health

During the field verification of the FHP area, a team evaluated the current state of the forest health in the area, as outlined in Section 10.1 of the OGRs.

No significant signs of disease or insect infestations were discovered.

OGR Deviations

Understory Assessment

This area will be developed as a mine site within 5 years' time; Alberta- Pacific is requesting a waiver of the obligation to protect understory in this area.

Road Deviations

The following table outlines the blocks which are greater than 7 hectares, with potentially more than 5% road disturbance.

Road Percent Deviations Table

(Volumes rounded to whole numbers)

Source ID	Opening Number	Road Percentage
09710421721	4100972172	9.45
09810423341	4100982334	5.54
09710422541	4100972254	7.29
09710429631	4100972963	4.87
09810411261	4100981126	7.73
09710428241	4100972824	4.75
09710418241	4100971824	4.16
09710419711	4100971971	6.48
09710407231	4100970723	4.55
09710428271	4100972827	4.64

Table 6: Road Percent Deviations

Blocks which may require roads exceeding the allotted 5% block disturbance

Forest Aesthetics

Alberta Pacific is requesting a waiver from Section 5.5 of the OGRs' regarding forest aesthetics as this area is planned to be developed into a mine site; no road side buffers or planned retention will be left adjacent to Highway 63 to limit line of sight in blocks. Lesser vegetation between the highway and the harvest blocks along the highway may minimize line of sight within portions of the blocks adjacent to Highway 63.

Spatial Harvest Sequence Information / Variance Summary

This plan is located within the SMA and has no SHS, consequently, no variance summary is included.

Silviculture Information

Silviculture declarations have not been included due to impending mine development. Alberta-Pacific is requesting a waiver of reforestation obligations within this planning unit.

Appendices

Appendix 1 – FHP Block Maps

Appendix 2 – FHP Overview Map