

July 14, 2008

## Daishowa Marubeni International Ltd Peace River Pulp Division

### FINAL ANNUAL OPERATING PLAN

#### INTRODUCTION

This plan for Compartment **FMA P040120** (located in Twp88 and 89, Rges 17 to 19 – W5) issued under **Forest Management Agreement 8900027** covers the operating period from May 1, 2008 to April 30, 2009.

The proposed location of manufacture for deciduous volume under the authority of this plan is the Daishowa Marubeni International Ltd., Peace River Pulp Mill located near Peace River, Alberta.

Incidental coniferous timber harvested as a result of deciduous harvesting operations, will be directed to Buchanan Lumber located in High Prairie, AB and Boucher Brothers lumber in Nampa, AB.

Table 7 of Peace River Pulp Division's (PRPD) 2008 General Development Plan (GDP) summarizes incidental conifer volumes and destination.

Upon delivery to respective mill sites all material will be weigh scaled.

#### DECIDUOUS PRODUCTION (Quadrant)

Proposed Production for this timber year:

Deciduous Dominated Stands: **101,656 m<sup>3</sup>**

Incidental Conifer: **16,924 m<sup>3</sup>**

The deciduous production record is summarized in **Table 1** of PRPD's 2008 GDP.

#### WOOD OPERATIONS

Deciduous operating conditions and merchantability standards are subject to the DMI Timber Harvest Planning and Operating Ground Rules, Operating Conditions listed in Section 5 of PRPD's General Development Plan and any additional Operating conditions listed in the Alberta Sustainable Resource Development (ASRD) Letter of Approval.

The coniferous operations and merchantability standards will comply with the Alberta Timber Harvest Planning and Operating ground Rules and any additional Operating conditions listed in the ASRD Letter of Approval.

**ACCESS DEVELOPMENT**

Prior to company use of any existing road, pipeline, power line, well site or other disposition held by a third party, the consent of the holder will be obtained.

Reclamation will be concurrent with completion of operations. The access development and reclamation will follow the company's weed control plan.

**Existing Access requiring consent:**

Number	Held By	Road Class	Season of Operation
LOC031929	Daishowa Marubeni International Ltd	V	Winter
RRD9122256	Northern Sunrise County	III	Dry weather or winter
RRD9122257	Northern Sunrise County	III	Dry weather or winter
RRD9123573	Northern Sunrise County	III	Dry weather or winter
LOC942129	Husky Oil Operations Limited	V	Winter
PLA972073	Shell Canada Limited	Crossing-8	
PLA931093	Nova Gas Transmissions Ltd	Crossing-8	
LOC070791	Husky Oil Operations Ltd	V	Winter

**Road Construction**

**Class V Roads**

Inter block roads are given the same number of the block being accessed by it. In-block roads will be installed during the harvest of 2008/2009. The block roads will be reclaimed upon completion of hauling.

Road Number	Class	Frozen or Non-Frozen Operable	Tenure	Development Required	Reclamation
17	V	Frozen	1 Year	Blade line, Pre-log and stump block roads	Rollback and piling as required
18	V	Frozen	1 Year	Blade line, Pre-log and stump block roads	Rollback and piling as required
19	V	Frozen	1 Year	Blade line, Pre-log and stump block roads	Rollback and piling as required
20	V	Frozen	1 Year	Blade line, Pre-log and stump block roads	Rollback and piling as required
22	V	Frozen	1 Year	Blade line, Pre-log and stump block roads	Rollback and piling as required
23	V	Frozen	1 Year	Blade line, Pre-log and stump block roads	Rollback and piling as required
24	V	Frozen	1 Year	Blade line, Pre-log and stump block roads	Rollback and piling as required
25	V	Frozen	1 Year	Blade line, Pre-log and stump block roads	Rollback and piling as required
26	V	Frozen	1 Year	Blade line, Pre-log and stump block roads	Rollback and piling as required
27	V	Frozen	1 Year	Blade line, Pre-log and stump block roads	Rollback and piling as required

Road Number	Class	Frozen or Non-Frozen Operable	Tenure	Development Required	Reclamation
28	V	Frozen	1 Year	Blade line, Pre-log and stump block roads	Rollback and piling as required
29	V	Frozen	1 Year	Blade line, Pre-log and stump block roads	Rollback and piling as required
30	V	Frozen	1 Year	Blade line, Pre-log and stump block roads	Rollback and piling as required
31	V	Frozen	1 Year	Blade line, Pre-log and stump block roads	Rollback and piling as required
32	V	Frozen	1 Year	Blade line, Pre-log and stump block roads	Rollback and piling as required
33	V	Frozen	1 Year	Blade line, Pre-log and stump block roads	Rollback and piling as required
34	V	Frozen	1 Year	Blade line, Pre-log and stump block roads	Rollback and piling as required
35	V	Frozen	1 Year	Blade line, Pre-log and stump block roads	Rollback and piling as required
37	V	Frozen	1 Year	Blade line, Pre-log and stump block roads	Rollback and piling as required
38	V	Frozen	1 Year	Blade line, Pre-log and stump block roads	Rollback and piling as required
39	V	Frozen	1 Year	Blade line, Pre-log and stump block roads	Rollback and piling as required

### **STREAM CROSSINGS**

The table below lists the crossings to be utilized during this timber year. This table does not list crossings that are located on routes held under LOC by DMI or other companies. A crossing may be required in block 33 after it has been determined whether or not the creek in the block requires a buffer.

The removal of crossings constructed with snow or logs fills will be removed after operations are completed.

The crossings listed in this table do not require any approval from Department of Fisheries and Ocean Canada or the Water Management Division of Alberta.

Crossing No.	Structure	Stream Class	Company
1	Logfill / Snowfill	intermittent	DMI
2	Logfill / Snowfill	intermittent	DMI
3	Logfill / Snowfill	intermittent	DMI
4	Logfill / Snowfill	intermittent	DMI
5	Logfill / Snowfill	intermittent	DMI
6	Logfill / Snowfill	intermittent	DMI
7	Logfill / Snowfill	intermittent	DMI
14	Logfill / Snowfill	intermittent	DMI

15	Logfill / Snowfill	intermittent	DMI
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## **OPERATIONS**

Access to this year's operating blocks goes through a portion of the "Special Access Zone" (SRD 2002). During long periods of inactivity (periods exceeding 72 hr) access will be blocked.

Coniferous harvesting will be mechanized and completed with a feller-buncher, grapple skidder, and stroke delimeter with tree-length haul to sawmill.

Deciduous harvesting will utilize a feller-buncher, grapple skidder and a bush chipper hauling chips to the pulp mill.

## **TRAPPER NOTIFICATION**

All Trappers will receive a copy of this Final AOP .

<b>NUMBER</b>	<b>HOLDER</b>	<b>CONTACT DATE</b>	<b>METHOD</b>	<b>ISSUES</b>
467	Beatrice Tourangeau	Copy of Preliminary AOP (March 2007)	Registered Mail	
		Copy of Final AOP (June 2007)	Registered Mail	
		Copy of Final AOP (May, 2008)	Registered Mail	
1352	John Cardinal	Copy of Preliminary AOP (March 2007)	Registered Mail	
		Copy of Final AOP (June 2007)	Registered Mail	
		Copy of Final AOP (may, 2008)	Registered Mail	
2574	Joseph Whitehead	Copy of Preliminary AOP (March 2007)	Registered Mail	
		Copy of Final AOP (June 2007)	Registered Mail	
		Copy of Final AOP (May, 2008)	Registered Mail	

## **DESIGN CONSIDERATIONS**

The deciduous component of this plan was designed with objectives from the 1999 DMI Detailed Forest Management Plan and PRPD's 2008 GDP.

1. Implement a single-pass harvest system that utilizes natural stand boundaries as block boundaries to avoid potential fragmentation of the landbase.

2. Retain merchantable volume within harvested areas of retention outlined in PRPD's "Retention Strategy". This retention will contribute to the overall goal of retaining 15% at the landscape level. The actual retention for individual blocks will vary between 0 and 30%. Because of the irregular shape and small size of the blocks in this area, retention of 15 % may not be achieved. The shape and size of the blocks reduces the need and ability to leave large retention patches. Many of the blocks have had deletions of non merchantable and marginally merchantable area within and along the block boundary. These deletions provide the kind of diversity that would have been left in this area after a natural disturbance. There may be a need to increase retention elsewhere within the compartment if the landscape is lacking the desired building blocks that will help it maintain a close semblance to natural vegetation form.
3. Design in-block roading to minimize road construction, reclamation requirements, and access throughout the area after harvest.

### **CUTBLOCK SUMMARY**

The cutblock summary is listed below

<b>Block Number</b>	<b>Total Area (ha)</b>	<b>GPS retention patches (ha)</b>	<b>% retention</b>	<b>DEC Vol. (m<sup>3</sup>)</b>	<b>CON Vol. (m<sup>3</sup>)</b>
17	22.3	1.55	6.5	4468	809
18	11.5	0.38	3.2	2294	415
19	7.42	0	0	1483	268
20	35.5	2.19	5.8	5121	927
22	50.8	1.78	3	9589	584
23	50.3	0.2	0.5	11609	2079
24	5.1	0	0	1251	226
25	26.8	0.32	1	5236	752
26	7.82	0	0	1754	317
27	5.5	0	0	1193	73
28	4.2	0	0	925	56
29	5.3	0	0	1151	70
30	14.7	0	0	3142	341
31	4.1	0	0	1007	182
32	5.3	0	0	553	100
33	19.1	1.1	5	4157	254
34	7.8	0.43	5.8	1626	324
35	45.2	1.35	3.4	9949	2469
37	40.5	1	2.6	7565	1686
38	70.5	4.54	6.3	12322	2224
39	58.28	4.45	5.3	15257	2762
<b>Totals</b>	<b>495.95</b>	<b>20.3</b>		<b>101657</b>	<b>16924</b>

### **BLOCK SEQUENCING**

Blocks 17, 18, 20, and 22 are located within the Ungulate Wildlife Zone. The intention is to harvest these blocks before the January 15 deadline for active operations. However, ground conditions may prevent that from happening and an extension may be required

in order to get the blocks completed. The harvest sequence of these blocks will be 17, 18, 20, and 22.

### **SLASH DISPOSAL**

Slash disposal guidelines set out in section five of the 2008 GDP will be followed. Chipping debris (hog piles) in these blocks will be processed, live fed into B -trains and transported to the DMI mill site where it will be used to power the boiler. A copy of DMI's Hogging Procedures on Crown Land is in Appendix 5 of the GDP.

### **HISTORICAL RESOURCE CONSIDERATIONS**

This plan's operations will comply with the Alberta Historical Resources Act.

### **UNDERSTORY MANAGEMENT**

Any areas of understory encountered during operations within these blocks will be assessed and protection measures implemented as indicated in DMI's understory protection guidelines located in Section 5 of the 2008 GDP.

The inspecting Forest-Officer will be notified of any changes to the understory protection prescriptions

### **REFORESTATION PROGRAM**

The Reforestation Table below outlines the proposed harvest system, silviculture system (strategy) and reforestation tactic for the blocks to be harvested.

Timber Year	Disposition	Block	Area (0.1 ha)	Pre-Harvest Assessment Completed	Frozen or Non-Frozen Operable	Proposed Harvest System	Silviculture System	Reforestation Tactic
2008	FMAP040120	17	22.3	No	Frozen	Roadside Chipper	Clearcut	Leave for Natural Suckering
2008	FMAP040120	18	11.5	No	Frozen	Roadside Chipper	Clearcut	Leave for Natural Suckering
2008	FMAP040120	19	7.42	No	Frozen	Roadside Chipper	Clearcut	Leave for Natural Suckering
2008	FMAP040120	20	35.5	No	Frozen	Roadside Chipper	Clearcut	Leave for Natural Suckering
2008	FMAP040120	22	50.8	No	Frozen	Roadside Chipper	Clearcut	Leave for Natural Suckering
2008	FMAP040120	23	50.3	No	Frozen	Roadside Chipper	Clearcut	Leave for Natural Suckering
2008	FMAP040120	24	5.1	No	Frozen	Roadside Chipper	Clearcut	Leave for Natural Suckering
2008	FMAP040120	25	26.8	No	Frozen	Roadside Chipper	Clearcut	Leave for Natural Suckering
2008	FMAP040120	26	7.82	No	Frozen	Roadside Chipper	Clearcut	Leave for Natural Suckering
2008	FMAP040120	27	5.5	No	Frozen	Roadside Chipper	Clearcut	Leave for Natural Suckering
2008	FMAP040120	28	4.2	No	Frozen	Roadside Chipper	Clearcut	Leave for Natural Suckering
2008	FMAP040120	29	5.3	No	Frozen	Roadside Chipper	Clearcut	Leave for Natural Suckering
2008	FMAP040120	30	14.7	No	Frozen	Roadside Chipper	Clearcut	Leave for Natural Suckering

Timber Year	Disposition	Block	Area (0.1 ha)	Pre-Harvest Assessment Completed	Frozen or Non-Frozen Operable	Proposed Harvest System	Silviculture System	Reforestation Tactic
2008	FMAP040120	31	4.1	No	Frozen	Roadside Chipper	Clearcut	Leave for Natural Suckering
2008	FMAP040120	32	5.3	No	Frozen	Roadside Chipper	Clearcut	Leave for Natural Suckering
2008	FMAP040120	33	19.1	No	Frozen	Roadside Chipper	Clearcut	Leave for Natural Suckering
2008	FMAP040120	34	7.8	No	Frozen	Roadside Chipper	Clearcut	Leave for Natural Suckering
2008	FMAP040120	35	45.2	No	Frozen	Roadside Chipper	Clearcut	Leave for Natural Suckering
2008	FMAP040120	37	40.5	No	Frozen	Roadside Chipper	Clearcut	Leave for Natural Suckering
2008	FMAP040120	38	70.5	No	Frozen	Roadside Chipper	Clearcut	Leave for Natural Suckering
2008	FMAP040120	39	58.2	No	Frozen	Roadside Chipper	Clearcut	Leave for Natural Suckering

The Table below outlines pre harvest strata polygons by the four cover types based upon the current Forest Inventory data.

Timber Year	DISPOSITION	Block	Area (Ha)	Map Inventory Type (pre-harvest)-ha			
				<u>C</u>	<u>CD</u>	<u>DC</u>	<u>D</u>
2008	FMAP040120	17	22.3	0	0	0	22.3
2008	FMAP040120	18	11.5	0	0	0	11.8
2008	FMAP040120	19	7.42	0	0	0	7.42
2008	FMAP040120	20	35.5	0	0	0	35.5
2008	FMAP040120	22	50.8	0	0	0	50.8
2008	FMAP040120	23	50.3	0	0	0	50.3
2008	FMAP040120	24	5.1	0	0	0	5.1
2008	FMAP040120	25	26.8	0	0	0	26.8
2008	FMAP040120	26	7.82	0	0	0	7.82
2008	FMAP040120	27	5.5	0	0	0	5.5
2008	FMAP040120	28	4.2	0	0	0	4.2
2008	FMAP040120	29	5.3	0	0	0	5.3
2008	FMAP040120	30	14.7	0.5	0	0	14.2
2008	FMAP040120	31	4.1	0	0	0	4.1
2008	FMAP040120	32	5.3	0	0	0	5.3
2008	FMAP040120	33	19.1	0	0	0	19.1
2008	FMAP040120	34	7.8	0.8	0	0	7.0
2008	FMAP040120	35	45.2	3.5	0	4.9	36.8
2008	FMAP040120	37	40.5	2.6	0	0.6	37.3
2008	FMAP040120	38	70.5	0	0	0	70.5
2008	FMAP040120	39	58.2	4.1	0	0	54.1
<b>Total</b>			495.95	0	0	0	495.95

**ENDORSEMENT OF AOP BY FMA HOLDER**  
**ENDORSEMENT OF AOP: FMAP040120**

AOP prepared by:

<b>Name: Peggy Pike</b>	<b>Name:</b> _____
<b>Position: Forest Resources Supervisor, Planning</b>	<b>Position:</b> _____
<b>Signature:</b> _____	<b>Signature:</b> _____
<b>Date:</b> _____	<b>Date:</b> _____
<b>Daishowa Marubeni International Ltd Peace River Division Postal Bag 6500 Peace River, AB T8S 1V5 (780) 624-7337</b>	<b>Contact Information: Buchanan Lumber Box 38 High Prairie, AB T0G 1E0 Phone: 523-4544</b>

<b>Name: Trina Tosh</b>	<b>Name: Phil Dube</b>
<b>Position: Forest Resource Supervisor</b>	<b>Position:</b> _____
<b>Signature:</b> _____	<b>Signature:</b> _____
<b>Date:</b> _____	<b>Date:</b> _____
<b>Daishowa Marubeni International Ltd Peace River Division Postal Bag 6500 Peace River, AB T8S 1V5 (780) 624-7337</b>	<b>Contact Information: Boucher Brothers Lumber Box 488 Nampa, AB T0H 2R0 Phone: (780) 322-3945</b>