# **Corporate Profiles**

This Appendix provides general information for the 4 companies that operate on the FMA area, namely:

- > Canadian Forest Products Ltd., Grande Prairie Operations;
- > Tolko Industries Ltd., High Prairie OSB Division;
- > Ainsworth Lumber Company Ltd.; and
- Grande Alberta Paper Ltd.

Each company provided the information contained within this Appendix.





# 1. Canfor Corporation

Canfor Corporation is a leading Canadian integrated forest products company based in Vancouver, British Columbia. The main operating company is Canadian Forest Products Ltd., from which the name Canfor is derived.

The majority of Canfor's woodlands operations and manufacturing facilities are in British Columbia and Alberta (Figure 1). The Company is a producer and supplier of lumber, kraft pulp and kraft paper. Canfor also produces remanufactured lumber products, hardboard paneling and a range of specialty wood products. Sales of products were \$2.3 billion in 2000.



Figure 1. Location of Canfor Facilities



On November 23, 1999, Canfor completed purchase of 100% of Northwood Inc., a major B.C. forest company operating in Prince George and the surrounding region. The addition of Northwood's operations makes Canfor the largest lumber producer in Canada at 2.7 billion fbm, and the largest producer of northern bleached kraft market pulp in Canada. Canfor employs over 5,760 directly and through affiliated companies. Canfor Corporation is listed on the Toronto and Vancouver stock exchanges.

The Company operates 7 sawmills in the northern interior of B.C. and 2 in Alberta, as well as 2 fingerjoint plants - 1 in Grande Prairie, Alberta and 1 in the Prince George, B.C. region. Edge-gluing and laminating are performed in Canfor's Northern Specialties operation in Prince George. A lumber remanufacturing facility with a capacity of 100 million fbm is operated by the Company's U.S. subsidiary, Canfor, U.S.A. Canfor's Panel and Fibre operation, located in New Westminster, B.C., uses residual fiber and urban wood to produce a variety of embossed hardwood panels, as well as wood fiber products for industrial applications.

Canfor operates 3 pulp and paper mills in Prince George, which produce 1,010,000 tonnes annually of high-quality, northern softwood kraft pulp and 120,000 tonnes of kraft paper. In addition, Canfor

#### Quick Facts 2000

#### Canfor Corp:

- Largest lumber producer in Canada at 2.7 billion fbm
- Largest producer of northern bleached kraft market pulp in Canada
- \$2.3 billion in sales in 2000
- Employs over 5,760 directly and through affiliated companies
- The AAC from replaceable (renewable) tenures is 8,260,943 m<sup>3</sup> in B.C. and 983,425 m<sup>3</sup> in Alberta
- One of the first forest products companies in western Canada to implement an environmental audit program

owns 50% of Howe Sound Pulp and Paper Ltd. located on the sunshine Coast, which produces 340,000 tonnes of northern softwood kraft pulp and 210,000 tonnes of newsprint.

Canfor contracts the operation of 3 lumber reloading and remanufacturing facilities in Edmonton, Alberta.

Canfor's products are sold in global markets. The Company has marketing offices in Canada, Europe and Japan.

Canfor's woodlands operations in Alberta are located almost exclusively on public lands. The annual allowable cut (AAC) from renewable tenures is 983,425 m<sup>3</sup> in Alberta.

Canfor is one of few forest product companies in western Canada to implement an environmental audit program. Canfor has operated a *Forest Practices Performance Review Program* to continuously improve the quality, effectiveness and consistency of forestry operations for many years. All of Canfor's woodlands operations, as well as the pulp mills, are certified under the ISO 14001 Environmental Management Systems Standard. Canfor has also attained certification of sustainable forest management under the Canadian Standards Association. In addition, Canfor's Alberta operations are certified under the Forest*Care* Program.

The Company has developed a document entitled *Canfor's Forestry Principles* that provides the foundation for forest management strategies, policies and operating procedures for all of the Company's operations into the next century. Canfor will be implementing the Principles over the next year.



# 1.1 Canfor Alberta Region

Canadian Forest Products Ltd. Alberta Region has grown from its small beginnings in 1953 as a plywood manufacturer to a modern and efficient producer of studs, dimension lumber and fingerjoint lumber. The Alberta Region is comprised of a dimension mill in Hines Creek and a dimension mill and fingerjoint complex in Grande Prairie, Alberta (Figure 2). The combined production of the 2 mills is 289 million fbm (MMfbm) of lumber annually. The side bar provides some additional information regarding the Alberta Region.

#### 1.1.1 Hines Creek Operations

The Hines Creek studmill came into being in 1969 when North Canadian Forest Industries Limited, a division of Canfor since 1981,

#### 2000 At a Glance

#### Canfor Alberta Region:

- ♦ 199 MMfbm of dimension lumber annually at Grande Prairie Operations
- 8 MMfbm of fingerjoint lumber annually
- 82 MMfbm of high-quality lumber annually at Hines Creek Operations
- Employees (direct): 315
- Contract employees: 300
- Property taxes: \$764,000
- Salary, wages & benefits (\$MM): \$34.4
- Contract services (\$MM): \$88.0
- Supplies (\$MM): \$13.2
- Energy (\$MM): \$5.8
- Stumpage (\$MM): \$20.0
- ♦ \$42 million spent on mill modernizations since 1994

purchased several small quotas near Fairview, Alberta. Further acquisitions of quota resulted in an expansion to the mill in 1972. Hines Creek currently produces 82 million fbm (MMfbm) of high-quality dimension lumber annually. In 1995, \$20 million (\$MM) was spent modernizing the Hines Creek mill and purchasing additional timber quota in Forest Management Unit (FMU) P1 North.

#### 1.1.2 Grande Prairie Operations

Canfor's long history of lumber production in Grande Prairie started in 1964 when North Canadian Forest Industries Limited (NCFI), Canfor's predecessor, acquired timber holdings in the area by signing a Forest Management Agreement (FMA) encompassing an area of approximately 287,863 ha.

In 1965, NCFI closed its bush mills and centralized its sawing, drying and planing operations at a studmill constructed in Grande Prairie. It became the first sawmill in Alberta to



**Figure 2. Grande Prairie Operations** The facilities underwent a \$22 million capital modernization in 2000.

produce woodchips from slabs and edgings. The woodchips were sent to Prince George by rail. NCFI became a Canfor division in 1981 and in 1985 constructed a fingerjoint plant at the sawmill site. Unfortunately, market conditions at the time made fingerjoint products uneconomical, and the plant was closed in 1988. The Grande Prairie studmill was replaced by a dimension sawmill in 1989. It utilized narrow kerf and optimizing technology to increase recovery. The fingerjoint plant was reopened in 1996 in an effort to increase utilization of residual materials and in response to improved markets. A brief chronological history of Alberta Region is contained in the sidebar (next page).



#### **1.2 Manufacturing Facilities**

Canfor Grande Prairie Operations is comprised of a dimension sawmill and a fingerjoint plant. In 2000 the sawmill produced 199 MMfbm of dimension lumber and the fingerjoint plant produced 8 MMfbm of fingerjointed studs. A description of the other products produced at the mill is found in Section 1.6 (products).

#### 1.2.1 Grande Prairie Dimension Sawmill

The dimension sawmill was constructed in 1989 and modernized in 1996 and again in 2001. The mill is designed for maximum flexibility and can cut metric and specialty products as well as North American sizes. The mill incorporates a variety of innovative equipment including computerized optimizers for the edger and trimmer, curve sawing for logs with sweep (curved logs) and an anti-stain system for offshore exports.

All logs delivered to the mill are decked in the yard and fed into the merchandizer by a 30-ton Ederer portable crane. From the merchandizer, sawlogs continue to either of the 17" or 27" Nicholson debarkers. After being debarked, some logs proceed through an USNR Quad canterline and then to a McGhee curve saw. Other logs proceed through the 28" canter-twin band line and depending on their size, they may be routed to a 10" gang edger or a single band resaw. Lumber from all of the lines goes directly to the Newnes multi-saw trimmer or reman edaer. All woodchips produced by the canterlines or reman are conveyed to the chip bins for later sale.

Rough lumber from both lines proceeds through the multi-saw trimmer and then to а 60-bin Newnes bin sorter. Trim ends are processed via a Nicholson chipper and the woodchips are conveyed to the 2 chip bins. At present, wood residue is burned in a hightemperature, low-emission Olivine incinerator (50 ft x 66 ft). Woodchips produced at the Grande Prairie sawmill are presently sold to Weverhaeuser in Grande Prairie.

After sorting to dimension and length in the bin sorter, rough lumber is kiln dried by 4, 104 foot

Abbreviated History of Canfor, Alberta				
	Region			
1953	Northern Plywoods Ltd. constructs a plywood mill on the outskirts of Grande Prairie to utilize balsam poplar.			
1961	North Canadian Forest Industries Limited (NCFI) is incorporated upon amalgamation of Grande Prairie Lumber Co. and Northem Plywoods Ltd. The Company successfully pioneers the use of lodgepole pine for plywood production.			
1964	NCFI acquires timber holdings by signing a Forest Management Agreement (FMA) encompassing approximately 287,863 ha.			
1965	NCFI closes its bush mills and centralizes the sawing, drying and planing operations in Grande Prairie. It becomes the first sawmill in Alberta to chip its slabs and edging. The chips are sent to Prince George by rail.			
1969	NCFI purchases several small quotas near Fairview and develops a studmill at Hines Creek, Alberta. Further acquisitions of quota results in an expansion in 1972.			
1974	NCFI acquires Imperial Lumber Company Ltd.			
1981	NCFI becomes a division of Canadian Forest Products Ltd. of Vancouver, B.C. The name is changed to Canadian Forest Products Ltd., Alberta Operations (Canfor). That same year, Canfor purchases Swanson Lumber Ltd. and the Chisholm planer mill holdings from Koppers International.			
1985	The Chisholm operation shuts down and the timber holdings sold to Vanderwell Contractors Ltd. The fingerjoint plant commences operations at Canfor's Grande Prairie location.			
1988	Fingerjoint plant ceases operations.			
1989	Grande Prairie studmill converts to a dimension sawmill utilizing narrow kerf and optimizing technology to increase recovery.			
1990	High Level operations sold to Daishowa- Marubeni International Ltd. (DMI).			
1991	The plywood plant ceases operation in February .			
1995	Hines Creek operations modernized with \$20 million investment.			
1996	Fingerjoint plant re-opens.			
1999	A \$22 million capital modernization of the lumber mill nears completion at the Grande Prairie operation.			
Future	Plans include the rebuilding of the fingerjoint plant.			



Table 82

long Salton kilns. This dried lumber is planed in a Coastal planer and trimmed by a Newnes multi-saw trimmer. Blocks from the trimmer are recovered and sent to the fingerjoint plant to produce value-added. Shavings from the planing process are blown to a bin and sold to NEWPRO (Northern Engineered Wood Products) for manufacture of particleboard. After the grade is identified by a Lucidine grade reader, the finished lumber is stacked via a Newnes 60-bin sorter, then stacked, strapped and wrapped ready for shipment to buyers.

#### 1.2.1.1 Capital Modernization

As part of its renewed Forest Management Agreement 9900037 with the Alberta Government, Canfor committed to upgrading the plant. A \$22 million capital modernization of the Grande Prairie facilities was completed in May 2000. The project is expected to increase lumber production by 25 MMfbm per year, or 14%, while processing the same amount of logs. The upgrade involved a number of projects including a new small canter line and replacement of the infeed and sawbox portions of the large canter line. In addition, a new shape-sawing gang edger was installed, which uses an advanced computer system to electronically scan the log to determine the best possible sawing solution that will recover the most lumber. Other updates include installation of new log decks, a 104-foot dry kiln, new step feeders and a chip handling and screening system. The upgrade ensures that Canfor continues to have the best available technology to serve the needs of its customers.

#### 1.2.2 Fingerjoint Plant

Value-added vertical studs are produced at the fingerjoint plant (Figure 3) from 14" – 24" trim ends (commonly called fingerjoint blocks) transferred from the planer mill.

The fingerjoint blocks are sorted, rejects are pulled out, and defects are trimmed off, i.e. skip, large knots, grain distortion and wane. Pieces are fed into a profile shaper where interlocking "fingers" are cut into the ends of the block. Glue is applied to the fingers and the pieces are fed lineally into a crowder machine, which creates end pressure by a series of drive and retard rollers. The result is a continuous piece of lumber, which is cut to the desired length with a flying cutoff-saw. The trimmed product travels onto a curing deck for approximately 8 minutes, then through a planer to clean off any excess glue, redoing the eased edge for a smooth finish. The studs are graded, stacked and stored indoors for 48 hours to allow for testing procedures. Once released, they are wrapped and ready to be shipped.



Figure 3. Fingerjoint Plant in Grande Prairie

Canfor is committed to continually improving upon the value of the raw material it sources from the forest. The fingerjoint plant uses fingerjoint blocks made from trim ends that historically would have been waste.



### 1.2.3 Edmonton Reload and Remanufacturing Facilities

Canfor and/or its partners operate 3 lumber reloading and remanufacturing (reman) facilities in Edmonton that employ a total of 44 people. In addition to the actual jobs at the reman/reload facilities, approximately 50 trucking jobs have been created. Total employment value is \$4.6 million per year (2000), including labour at the facilities.

The reload facilities transfer lumber from trucks to rail cars for rail delivery into Canada and the United States. Thirteen thousand trucks are unloaded onto 6,500 rail cars annually. In total, 700 MMfbm of lumber are transferred onto rail cars.

In addition to the reload facilities, the Company has formed a strategic alliance with Palliser Lumber Sales Ltd. for the manufacture of value-added lumber and other forest products. Remanufacturing at these facilities is done to increase the value of low-grade lumber (economy and utility). The resulting products are primarily sold to home centre customers in the United States. Approximately 10% of the raw material for these plants are provided by Canfor mills, with the balance coming from other sawmills, both in British Columbia and Alberta.

# 1.3 Annual Wood Requirements

Canfor's Grande Prairie facilities require 730,000 m<sup>3</sup> of logs annually; almost all of which is obtained from the FMA area (Table 1). The balance of the wood requirement come from salvage, private purchases, crown timber purchase programs and transfers from Canfor's Hines Creek Operation.

Approximately 586,000 m<sup>3</sup> of the established AAC (640,000 m<sup>3</sup>) harvested from the FMA area will be delivered for use in Canfor's sawmill and 54,000 m<sup>3</sup> will be pulpwood delivered to Weyerhaeuser.

# Table 1. Annual Wood Requirements (m<sup>3</sup>)

DMP\_Tables.xls Table 68

Deliveries to Grande Prairie Mill From FMA area		Purchas	e Wood	Hines Creek	Sawmill
FMA area	Salvage	Crown	Private	Transfers	Requirements
586,000	15,000	100,000	9,000	20,000	730,000

Notes: Volumes for 2001/2002 reflect current thinking. Volumes of purchase wood will be evaluated as it comes available Private wood will be purchased if it is economically attractive and environmentally sound to log

Source: Canfor compiled data

# 1.4 Lumber Recovery Factor

Canfor strives to recover as much useable wood from the log as possible and has recently modernized the sawmill and installed to achieve that objective. The Company's objective for the modernization is to increase lumber recovery factor (LRF) by 14% using the same volume of logs ("Critical Element 5c, Objective 1.2a.1"). The LRF prior to the mill modernization was 235 fbm/m<sup>3</sup>. After the modernization, the current LRF is 275 fbm per m<sup>3</sup>, an increase of 14.55%.



## **1.5 Benefits to the Community**

Canfor operates on publicly owned forestland in Alberta and as stewards of these resources, it recognizes that the forest sector is crucially important to local people and communities. As part of this sector, the Company plays a major role in the economic stability of the region by providing jobs, and paying taxes for social projects and initiatives (Table 2).

The Company's confidence in the future of the forest sector is reflected by the \$20 million capital modernization of the Hines Creek facilities and the recent \$22 million upgrade of the facilities in Grande Prairie.

The Forest Management Advisory Committee (FMAC) emphasized that local communities<sup>1</sup> must benefit from the presence of the FMA area and from the activities of the industries that operate in the FMA area. Canfor agrees with this principle and strives to hire local contractors and suppliers if they:

- Offer competitive skills;
- Have proper equipment;
- > Deliver goods and services at a competitive price; and
- Provide overall service.

It is Canfor's overall strategy to form long-term partnerships with suppliers and contractors to better service the needs of both parties.

#### **1.5.1 Contributions to Local Communities**

In 2000, Canfor contributed \$53.8 million to the local economy in the form of property taxes, salaries and wages, purchases, and community donations as indicated in Table 2. Canfor strives to hire local contractors and suppliers whenever possible and the Company's overall strategy is to form long-term relationships to better service the needs of all parties.

<sup>&</sup>lt;sup>1</sup> Local communities refer to those adjacent to the FMA area: for example, Valleyview, DeBolt, Fox Creek, Spirit River, Fairview, Grande Cache, and Grande Prairie. Municipal District (MD) of Greenview No. 16, MD of Spirit River No. 20 and County of Grande Prairie No. 1 are also deemed to be local communities.



# Table 2. Key Contributions to Local Communities

DMP\_Tables.xls Table 17

Contribution	Amount (\$MM) 2000	Amount (\$MM) 1999	Amount (\$MM) 1998	
Property Taxes	0.7	0.6	0.6	
Salary and Wages & Benefits	11.6	11.6	10.6	
Contract Services Local <sup>1</sup>	24.8	26.8	32.3	
Contract Services Non-local <sup>1</sup>	6.9	2.3	(combined) <sup>2</sup>	
Supplies	5.0	4.6	4.6	
Energy	2.3	2.2	1.9	
Stumpage	2.3	10.9	6.8	
Community Donations	0.1	0.1	0.1	
Total	53.8	59.1	56.9	
Nataa				

Notes:

 Canfor's accounting ledger currently does not distinguish between local and non-local contractors. However, an estimate of the local versus non-local has been determined, based on preliminary data stratification.

2. Local plus non-local contract services.

Source: Canfor accounting ledger

#### 1.5.2 Employment

In 2000, a total of 195 hourly, salary and other employees worked in the Grande Prairie facilities (Table 3). The Company's logging, trucking and reforestation contractors employed approximately 185 additional people. The Edmonton Reload Center employs an additional 44 people.

Hourly employees of the Grande Prairie facilities are members of the Communications, Energy and Paperworkers (CEP) Union. Their right to participate in organized labour is assured under the *Labour Relations Code*, Division 2 entitled, "Employee and Employer Rights", subsection 19(1) which states:

"An employee has the right:

- (a) to be a member of a trade union and to participate in its lawful activities, and
- (b) to bargain collectively with his employer through a bargaining agent."

# Table 3. Number of Employees

DMP\_Tables.xls Table 18

Location	Number of Employees (Direct)
Grande Prairie Sawmill	180
Grande Prairie Fingerjoint	15
Total	195

Source: Canfor compiled data



#### 1.5.3 Local Timber Supplies

In accordance with Forest Management Agreement 900037, Canfor must make 10,000 m<sup>3</sup> of coniferous timber available for the local Community Timber Use program and 0.5% of the coniferous annual allowable cut (AAC) is available for local use ("Critical Element 5c, Objective 1.1a.2").

#### 1.5.4 Recreation

Canfor is committed to maintaining 4 campgrounds in the FMA area for the public's enjoyment and provides support for the recreational fishery at Swan Lake located southwest of Valleyview.

#### 1.5.5 Lumber to Local Schools

As part of Canfor's commitment to the surrounding communities, the Company has responded to a request from the Forest Management Advisory Committee (FMAC) to provide assistance to the local schools by supplying lumber to shop classes. The Committee feels that younger children in school should receive some benefit from the FMA area.

Canfor is currently working with the Ridgevalley High School to provide trim ends from the fingerjoint plant to produce various products. The Company's intent is to provide trim ends into the school by September 2001. If this program is successful, it may be expanded to include other schools.

#### 1.6 Products

Canfor currently produces pulpwood logs, boards, dimension lumber, fingerjoint lumber, woodchips and shavings. Wood residues are currently incinerated; however, when the cogeneration plant described in Section 1.10 is constructed in 2002, wood residues will be fully utilized. The following sections provide additional information.

#### **1.6.1 Products from the Dimension Mill**

Table 4 provides the production of various products for 2000.



Length	Product (fbm)			
	Boards	Dimension Lumber	Fingerjoint Blocks	Total
2'	0	0	5,107,473	5,107,473
6'	1,219	2,350,872	31,620	2,383,711
8'	474,087	11,164,301	0	11,638,388
10'	302,036	21,746,997	0	22,049,033
12'	362,700	28,724,116	0	29,086,816
14'	274,839	42,748,787	0	43,023,626
16'	248,400	43,182,088	0	43,430,488
18'	0	6,230,016	0	6,230,016
20'	0	4,663,241	0	4,663,241
92 <sup>5/8"</sup>	0	146,082	0	146,082
104 5/8"	0	122,412	0	122,412
Total	1,663,281	161,078,912	5,139,093	167,881,286

# Table 4. Products by Size (Dimension Mill)

DMP\_Tables.xls Table 20

Source: Canfor compiled data

### **1.6.2 Products from the Fingerjoint Plant**

Table 5 provides the production from the fingerjoint plant for 2000.

# Table 5. Products by Size (Fingerjoint Plant)

DMP\_Tables.xls Table 21

	Product (fbm)		
Length (inches)	Dimension Lumber	Fingerjoint Blocks	Total
93	0	56,448	56,448
105	0	114,660	114,660
108	0	67,032	67,032
120	27,930	54,880	82,810
92 <sup>1/4</sup>	636,608	1,421,616	2,058,224
92 <sup>5/8</sup>	429,632	920,136	1,349,768
104 <sup>1/4</sup>	63,504	72,072	135,576
104 <sup>5/8</sup>	524,979	1,146,474	1,671,453
104 <sup>3/4</sup>	0	33,516	33,516
116 <sup>5/8</sup>	0	98,560	98,560
Total	1,682,653	3,985,394	5,668,047

Source: Canfor compiled data



#### 1.6.3 Value-added Products

Canfor will ensure a continuous supply of affordable timber in order to carry out its business of harvesting, manufacturing and marketing forest products. The Company will strive to maximize the net value of the fiber extracted for sustained economic benefits for employees, communities and shareholders (*Canfor Forestry Principles*).

Canfor is committed to continually improve upon the value of the raw material obtained from the forest. It is recognized that the wood fiber supply has special properties. The Company will constantly strive to develop suitable markets and manufacture products that provide higher economic margins. In addition, it will work on utilizing the whole log and will reduce the amount of fiber and bark burned as waste from its manufacturing processes (*Canfor Forestry Principles*).

As value-added initiatives, the Company operates a fingerjoint plant in Grande Prairie and provides lumber for remanufacturing facilities in Edmonton. The following sections provide the details.

### 1.6.3.1 Remanufacturing Products

The Company has formed a strategic alliance with Palliser Lumber Sales Ltd. for the manufacture of value-added lumber and other forest products in Edmonton, Alberta. Remanufacturing at these facilities increases the value of low-grade lumber (economy and utility). The resulting products are primarily sold to home centre customers in the United States. Approximately 10% of the raw material for these plants are provided by Canfor mills, with the balance coming from other sawmills both in British Columbia and Alberta.

#### 1.6.4 Woodchips and Shavings

In addition to the high-grade construction and fingerjoint products, the Grande Prairie sawmill facilities produce woodchips and shavings. In 2000, 111,097 oven dry tonnes (ODT) of woodchips and 23,000 ODT of shavings were produced (Figure 4). The woodchips are marketed to Weyerhaeuser Grande Prairie and the shavings are sold locally for livestock bedding, auctions and mulch.

#### 1.6.5 Mill By-Products and Wood Residue

Management of waste products, which is more accurately described as wood residue, is of major importance to Canfor. Wood residue is the remaining portion of a log that cannot be made into a useable product and may be comprised of various by-products such as sawdust, shavings, bark and trim ends.

Canfor's manufacturing facilities utilize the latest recovery technology to maximize the amount of useable product from each log. Efforts are continually being made to utilize as much of the remaining log by-products as



Figure 4. Woodchip Bin Canfor's Grande Prairie sawmill produces approximately 111,000 oven dry tonnes of woodchips annually. As the woodchips are produced, they are stored in a bin waiting for transport to a local pulp mill.

possible and to incinerate the minimal amount of wood residues. Canfor has undertaken



several initiatives to maximize log utilization and to reduce the amount of incinerated waste:

- Woodchips are sold for the manufacture of pulp;
- Sawdust is sold to local ranchers, tree nurseries and auction markets;
- > Lumber too short for dimension stock is utilized by Canfor's fingerjoint plant; and
- Canfor participated in a mill by-product study in cooperation with Fairview College and industrial partners. The study researched the efficacy of using by-products as amendments for improving soil structure, tilth and nutrient content.

Canfor and Canadian Gas and Electric Ltd. (CG&E) have recently initiated a project to use wood residue from Canfor's Alberta operations for a cogeneration facility. The project is a wood-waste-fired steam boiler that will generate 25 megawatts using a steam turbine (refer to Section 1.10).

# 1.7 Markets

Canfor produces a variety of dimension and fingerjoint lumber. Table 6 shows the volume breakdown by each market region for the year 2000. The majority of the sawmill lumber products are shipped to the U.S. markets (87.5%), 4.4% are distributed within Canada and 8.1% are sold to Japan. Approximately 47% of the products produced in Grande Prairie are graded as Canadian Lumber Standards (CLS)<sup>2</sup>, 34% are Prime<sup>3</sup> and square-edged lumber (SE), and 19% are the remaining grades.

<sup>&</sup>lt;sup>3</sup> Prime products, J-grade, premium studs. These products demand a higher premium for their appearance as well as for their structural strength.



<sup>&</sup>lt;sup>2</sup> CLS stands for Canadian Lumber Standards which is the grading standards for all dimension lumber. This includes products such as Boards 1x4-12 (#2,#2,#4 Commons), Light framing 2x4,6 (Std&Btr, Utility/#3, Economy), Joists and planks 2x8-12 (#2 & btr, #3 & Economy) and lastly, Studs 2x4-6, 8-10' (Stud & Economy).

Country	Prov./ State	Total (Mifbm)	%
Canada	AB	3,102	1.8
	ВC	3,374	2.0
	M B	110	0.1
	O N	567	0.3
	ΡQ	216	0.1
Subtotal		7,369	4.4
United States	AK	62	0.0
	FL	31,517	18.7
	G A	10,128	6.0
	IL	12,000	7.1
	IN	224	0.1
	LA	222	0.1
	M D	7,942	4.7
	MI	10,422	6.2
	MO	10,437	6.2
	NC	17,049	10.1
	ОН	5,023	3.0
	ΤN	4,264	2.5
	ТΧ	36,096	21.4
	WA	2,058	1.2
Subtotal		147,443	87.5
Japan		13,677	8.1
Total		168,490	100.0

### Table 6. 2000 Volume Breakdown by Province / State (Mfbm)

DFMP\_Tables.xls Table 33

Source: Canfor compiled data (ICMS)

#### 1.7.1 Customer Types

Products from the Grande Prairie Operations are allocated to the following customer types as indicated in Table 7. As mentioned previously, most of the lumber is transported to the Edmonton reload and then distributed to other locations. Home Depot's consignment yard takes the second highest volume allotment.

#### Table 7. Customer Types (2000)

DFMP\_Tables.xls Table 34

Customer Type	%
Distribution Edmonton	39
Consignment	21
Direct	12
Specialty	9
Offshore	8
Reload	6
Remanufacturing	4
Home Centre	1
Total	100

Source: Canfor compiled data



## 1.8 Incinerator

Non-useable wood residue from the manufacturing facilities is currently disposed of in an Olivine incinerator located on the mill site. The incinerator is designed and sized to readily accommodate the maximum discharge of residues and has sophisticated technical control instrumentation systems that carefully regulate the proper amounts of air to ensure almost complete combustion of wood residues. For maximum efficiency, the temperature of the incinerator is maintained at approximately 1,000° F. A specialized technician is assigned to ensure the incinerator is properly maintained and adjusted.

The incinerator ash is tested for contaminants and removed from the site by Reco Trenching Ltd. for land farming.

Canfor is cooperating with Canadian Gas and Electric to utilize the wood residues in a cogeneration project. The Olivine incinerator currently used to burn wood residues will be removed once the cogeneration plant has been operational for one year. Refer to Section 1.10 for additional details regarding the cogeneration plant.

### 1.9 Air Quality Monitoring

The incinerator meets all air quality regulations established by Alberta Sustainable Resource Development (ASRD). Air quality is monitored on a monthly basis from data collected at dust pots located at 11 different locations around the City of Grande Prairie. In addition, the Company maintains an instrument monitoring system for PM10-sized particles. Data is analyzed monthly to ensure established limits are not exceeded. Results are submitted to ASRD for review.

Various building exhaust systems, such as cyclones and other filtering devices, have been installed throughout the mill to prevent the release of particulates to the atmosphere.

Regular meetings are held to explore ways of improving air quality (4 employees are responsible for various components of air quality). Canfor also maintains a representative on the Alberta Forest Products Association (AFPA) Environmental Committee and the Peace Air Shed Zone Association (PASZA). In addition, the Company works closely with Clean Air Strategic Alliance (CASA) in development of a cross-country air monitoring system.

#### 1.10 Cogeneration Project

Canfor and Canadian Gas and Electric Ltd. (CG&E) have recently initiated a project to use Canfor's wood residue for a cogeneration facility located on Canfor's Grande Prairie mill site. The project is a wood-waste-fired steam boiler that will generate 25 megawatts using a steam turbine (Figure 5).



The plant will provide electric power generation for Canfor and a source of heat for the mill facilities and drv kilns, replacing natural gas. The project will consume all of the wood residues generated by Canfor, Alberta Region, thereby facilitating the of closure the incinerator at Grande Prairie and the beehive burner at Hines Creek. Approximately 2/3 of the wood residues will come from Grande Prairie and the remainder from Hines Creek.



#### Figure 5. Schematic of the Cogeneration Plant

The cogeneration plant uses wood residues to produce electricity and heat for Canfor's mill buildings and dry kilns. CG&E is considering a district heating initiative that could supply heat energy to city and government buildings.

Residues from Hines Creek (40,000 tonnes) will be stored at a remote storage site, located north of the City, resulting in approximately 5-6 B-train loads per day being transported to the cogeneration facilities annually.

The proposed cogeneration plant will produce ash, which will temporarily be transported to the City's landfill, and clinkers, which will be spread on Canfor's haul road as aggregate. Electrostatic precipitators will be installed to meet permit requirements for fly-ash.

The project will be constructed on a 3 ha parcel located on Canfor's mill site adjacent to Wapiti Road (108 St) and immediately southwest of the incinerator.

CG&E is also considering a district heating initiative where a hot water line could be installed to supply heat energy to the Grande Prairie Regional College and other government buildings (i.e. schools, AADAC, Youth Assessment Centre, recreation complex, etc.).

Regulatory and environmental permitting has been obtained and construction will commence summer 2001, with completion and commissioning of the facilities scheduled for 2002.

#### 1.11 Waste Management

All waste antifreeze, scrap metal, banding, solvents, waste paint, oil filters, batteries, tires, barrels and drums, paper, cardboard, cloth rags and pop cans are recycled. Metal,



wood and domestic wastes are kept separated at the source. There are various containers around the sawmill site for each of these wastes.

#### 1.12 Fuel Storage

All underground storage tanks have been removed and the site has been reclaimed and the soil tested. New equipment with double-walled tanks were installed above ground in 1998. In the event of a spill, the storage site has an approved containment system and fluids drain to an oil/water separator.

#### 1.13 Safety and Training

At Canfor, **"SAFETY COMES FIRST**" as expressed in its Corporate Policy (Figure 6). The sawmill and woodlands have separate health and safety programs based on the Corporate Policy and designed specifically for their set of circumstances. Canfor meets or exceeds all health and safety legislation and regulations.

#### 1.13.1 Sawmill Health and Safety Program

The responsibilities for management, supervisors, employees, contractors and visitors are clearly outlined in the sawmill's safety program that is updated annually. An active Joint Health & Safety Committee (6 members from management and 6 members from the union) meets monthly to discuss and manage safety issues.

Before commencing their jobs, employees participate in a safety orientation process. Training is provided for any new job to which an employee is assigned. This training consists of working with a competent operator, computer-based safety training for each specific job, lockout reviews and daily training updates by supervisors.

Canfor participates in the *Partners in Injury Reduction* program jointly sponsored by Alberta Human Resources and Employment and the Workers' Compensation Board of Alberta. Annual peer audits are conducted, and the Company has consistently scored very well in these audits and has maintained its Certificate of Recognition. As well, the Company has received ForestCare certification in the areas of safety, environment and communication with all areas scoring in the "ForestCare" or "Alberta State of the Art" ranges.





#### 1.13.2 Woodlands Health and Safety Program

Canfor's Forestry Principles state, "We will operate in a manner that protects human health and safety. We have a long-standing tradition of promoting health and safety for our employees. We will not compromise this tradition as we implement these Forestry Principles."

As a result, the Health and Safety Program for Alberta Woodlands Operations (Canfor 2000o) is designed to meet all legal requirements and is reviewed and updated annually. The plan provides a summary of the legislation regarding health and safety, employee responsibilities for safety, and communication procedures in the event of a safety emergency. Training requirements are outlined to ensure all employees know how to do their jobs safely. Annual mock emergency drills are conducted for contractors and staff.

All accidents must be reported to Canfor and all lost-time accidents are investigated to prevent recurrence.

Each staff member and contractor foreman is issued a copy of the *Canfor Health and Safety Plan*. In addition, all prime contractors are required to develop and implement their own safety plan.



Additional information about Canfor Corporation can be found on the internet at <u>www.canfor.com</u> or by contacting the Grande Prairie Operations at the address listed below.

Canadian Forest Products Ltd. 9401 - 108 Street Postal Bag 100 Grande Prairie, Alberta Canada T8V 3A3 Phone: (780) 538-7749 Fax: (780) 538-7800





# 2.0 Tolko Industries Ltd. (Corporate Overview)

Tolko Industries Ltd. is a privately owned Canadian company founded in 1961 by Mr. Harold Thorlakson. The Company has 9 manufacturing divisions, 4 marketing and sales divisions and employs over 2,300 people throughout British Columbia (Lavington Merrit, Heffley Creek, Louis Creek and Quesnel), Alberta (High Prairie and High Level) and Manitoba (The Pas). The Company's woodlands departments manage approximately 6.8 million ha of productive forest in western Canada.

# 2.1 Tolko Industries Ltd. (High Prairie OSB Division)

High Prairie Division, Tolko's first OSB (oriented strand board) mill, is a modern manufacturing facility located in High Prairie, Alberta. The mill has a 12 foot-wide forming line feeding a 12 opening, 12-foot by 24-foot press, with a rated capacity of 525 million square feet on a 3/8 inch basis. The mill consumes approximately 850,000 m<sup>3</sup> per year of deciduous fiber from public and private land.

The High Prairie woodlands operating area extends in a radius of approximately 250 km from the mill and provides an annual harvest of up to 850,000 m<sup>3</sup> of trembling aspen (*Populus tremuloides* Michx.), balsam poplar (*Populus balsamifera* L.) and a small component of white birch (*Betula papyrifera*). The total "secured" deciduous fiber supply (Table 8) consists of 371,500 m<sup>3</sup> per year from Tolko's FMA Area, 60,500 m<sup>3</sup> per year from Deciduous Timber Allocation (DTA) G02C001, 54,512 m<sup>3</sup> per year from DTA G050001 and 95,788 m<sup>3</sup> per year from DTA S010007, for a total supply of 582,300 m<sup>3</sup> per year. The balance of the necessary wood supply is accessed through both private and crown land timber purchase programs.

# Table 8. Summary of Existing Fiber Supply.

DFMP\_Tables.xls Table 76

	Solid Wood Fiber Sources		
Disposition	(m <sup>3</sup> )		
FMA 9700033	371,500		
DTA G05000 <sup>1</sup>	54,512		
DTA G02C00 <sup>1</sup>	60,500		
DTA S010007	95,788		
Total	582,300		
Notes:			
1. DTA = Deciduous Timber Allocation			
DTA G0500001 and DTA G02C001 are within Canfor's FMA 9900037			

Sources: Tolko Industries Ltd



Additional information about Tolko Industries Ltd. is available on the internet at <u>www.tolko.com</u> or by contacting the High Prairie OSB Division at the address listed below.

TOLKO INDUSTRIES LTD. High Prairie OSB Division Bag 3000 High Prairie, Alberta Canada T0G 1E0 Phone: (780) 523-2101 Fax: (780) 523-2204



# Ainsworth

# 3. Ainsworth Lumber Co. Ltd.

Ainsworth Lumber Co. Ltd., based in Vancouver, B.C. was formed in 1952 and is 100% Canadian owned and operated. In British Columbia, Ainsworth operates a veneer plant in Lillooet, a plywood facility in Savanna, a fingerjoint plant in Abbottsford and an Oriented Strandboard (OSB) plant in 100 Mile House. In Alberta, Ainsworth operates an OSB plant in Grande Prairie and recently completed construction of North America's largest single line OSB facility in High Level in partnership with Grant Forest Products.

Ainsworth Lumber Co. Ltd. commenced operations at its Grande Prairie OSB facility on December 14, 1995. The mill is located 16 km south of the City of Grande Prairie along Highway 40. Ainsworth was recently awarded, through the request for proposal process, the rights to harvest deciduous timber in the G5C and G14 Forest Management Units. This timber will be used to support the construction of a second line at Grande Prairie to produce a new value-added product with OSB as the core and particleboard or medium density fiberboard as the face. This expansion will also include a laminating line to add further value to this product and a hardwood sawmill in the Valleyview area. The original capital expenditure for the Grande Prairie mill was \$150 million. The capital expenditure for the second line, laminating facility and sawmill is projected to be \$141 million. In the second line proposal, Ainsworth committed to the following:

- David and Susan Ainsworth Fund: The Company has committed to donating \$1,500,000 (\$150,000 per year for 10 years) to this fund which will support activities involving youth, education, community projects, and programs to improve the quality of life of area residents;
- Infrastructure Fund: Ainsworth will contribute \$150,000 per year for 5 years for use in maintaining and upgrading public infrastructure (such as dust control and bridge maintenance and upgrading) in areas where Ainsworth makes use of public roads;
- Aboriginal Business Development Fund: Ainsworth will contribute \$0.75 per m<sup>3</sup> for 5 years (approximately \$150,000 per year) from wood harvested from G5C and G14 to support aboriginal business development; and
- Integrated Resource Management Fund: Ainsworth will contribute \$0.25 per m<sup>3</sup> (approximately \$50,000 per year) for wood harvested from G5C and G14 to support research into ecological management, wildlife habitat, etc.). This will complement Ainsworth's existing program that contributes approximately \$175,000 per year and is tied to wood harvested from G91. To date approximately \$650,000 has been spent through this program in 26 projects, most of which have multiple partners.

The *David and Susan Ainsworth Fund* was initiated in 2001; the remaining commitments are tied to when harvesting will commence for the second line.

The Grande Prairie mill and value-added facilities currently consist of an OSB mill, a rim board facility and a tongue and groove/sanding line. This facility will use approximately 1,000,000 m<sup>3</sup> of deciduous fiber in 2001 to produce approximately 600 million square feet of oriented strandboard on a 3/8" basis. Tables 9 and 10 outline Ainsworth's annual wood flow requirements and sources for the Grande Prairie mill, expansion and the Valleyview sawmill. Ainsworth's Grande Prairie mill was designed to pursue commodity OSB sheathing and flooring markets in North America, new and expanding markets in



Asia and specialty or niche markets which include oversized panels (custom size - based on order), furniture and other products. The mill has the flexibility to produce a wide variety of different board thickness ranging from 1/4" to 1 1/2". The mill also has the capability to produce boards in metric sizes ranging from 9 mm to 30 mm. The saw line or finishing end has the capability to saw boards to the standard North American 4' x 8' dimension or to 3' x 6' Japanese dimensions. Custom dimensional sawing is also possible depending on customer requirements.

# Table 9. Solid Wood Fiber Annual Requirements (m<sup>3</sup>)

DFMP\_Tables.xls

	Solid Wood Fiber Annual Requirements
Facility	(m <sup>3</sup> )
Grande Prairie OSB Plant	1,000,000
Grande Prairie Second Line – Combi-Panel	450,000
Valleyview Hardwood Sawmill	50,000
Total	1,500,000

Source: Ainsworth Lumber Co. Ltd.

# Table 10. Solid Wood Fiber Sources (m<sup>3</sup>)

DFMP\_Tables.xls Table 78

Disposition	Solid Wood Fiber Sources (m <sup>3</sup> )	
G91 Deciduous Timber Allocation	791,020	
G5C Deciduous Timber Allocations	170,000	
G14 Deciduous Timber Allocations	21,000	
Timber Purchase <sup>1</sup>	367,980	
Industrial Salvage	150,000	
Total	1,500,000	
<b>Notes:</b> 1. Includes volume purchased from Private Landholders, Crown Timber Permit Holders and/or other Forest Tenure Holders - G5C Decidous Timber Allocation is within Canfor's FMA 9900037		

Source: Ainsworth Lumber Co. Ltd.

Additional information about Ainsworth Lumber Company Ltd. is available at <u>www.ainsworth.ca</u> or the address listed below.

Ainsworth Lumber Company Ltd. Postal Bag 6700 Station M Grande Prairie, Alberta Canada T8V 6Y9 Phone: (780) 831-2500 Fax: (780) 831-2501





# 4. Grande Alberta Paper Ltd.

In 1996, Grande Alberta Paper Ltd. (GAP) reached an agreement in principle with the Province of Alberta to construct a single-line lightweight paper mill near Grande Prairie. The Crown has made provision for GAP's timber requirements by planning for a deciduous allocation of 169,000 m<sup>3</sup> per year within FMU G5C.

Additional information about Grande Alberta Paper Ltd. is available at the address listed below:

Grande Alberta Paper Ltd. C/o Doug Walker, RPF Chief Operating Officer Timberline Forest Inventory Consultants #315, 10357 - 109 Street Edmonton, Alberta Canada T5J 1N3 Phone: (780) 425-8826 Fax: (780) 428-6782

