

Supply Base Report: RENTECH Atikokan Facility RTK WP2 Canada, ULC

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Completed in accordance with the Supply Base Report Template Version 1.1

For further information on the SBP Framework and to view the full set of documentation see www.sustainablebiomasspartnership.org

Document history

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1 Overview

Producer name: **RTK WP2 Canada, ULC dba Rentech**

Producer location: 106 Goodwin Street
Atikokan, Ontario, Canada

Head Office:
981 Balmoral St., Suite 101
Thunder Bay, ON,
Canada P7B 0A6

Geographic position: 48° 45' 35.0388" N 91° 37' 57.7848" W

Primary contact: Pierre-Olivier Morency, RPF
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(418) 554-1101, pmorency@rentk.com

Company website: www.rentechinc.com

Date report finalised: 15/Jul/2016

Close of last CB audit: 17/Jun/2016

Name of CB: PricewaterhouseCoopers LLP

Translations from English: No

SBP Standard(s) used: Standard 2 version 1.0; Standard 4 version 1.0; Standard 5 version 1.0

Weblink to Standard(s) used: <https://sbp-cert.org/documents/standards-documents/standards>

SBP Endorsed Regional Risk Assessment: Not applicable

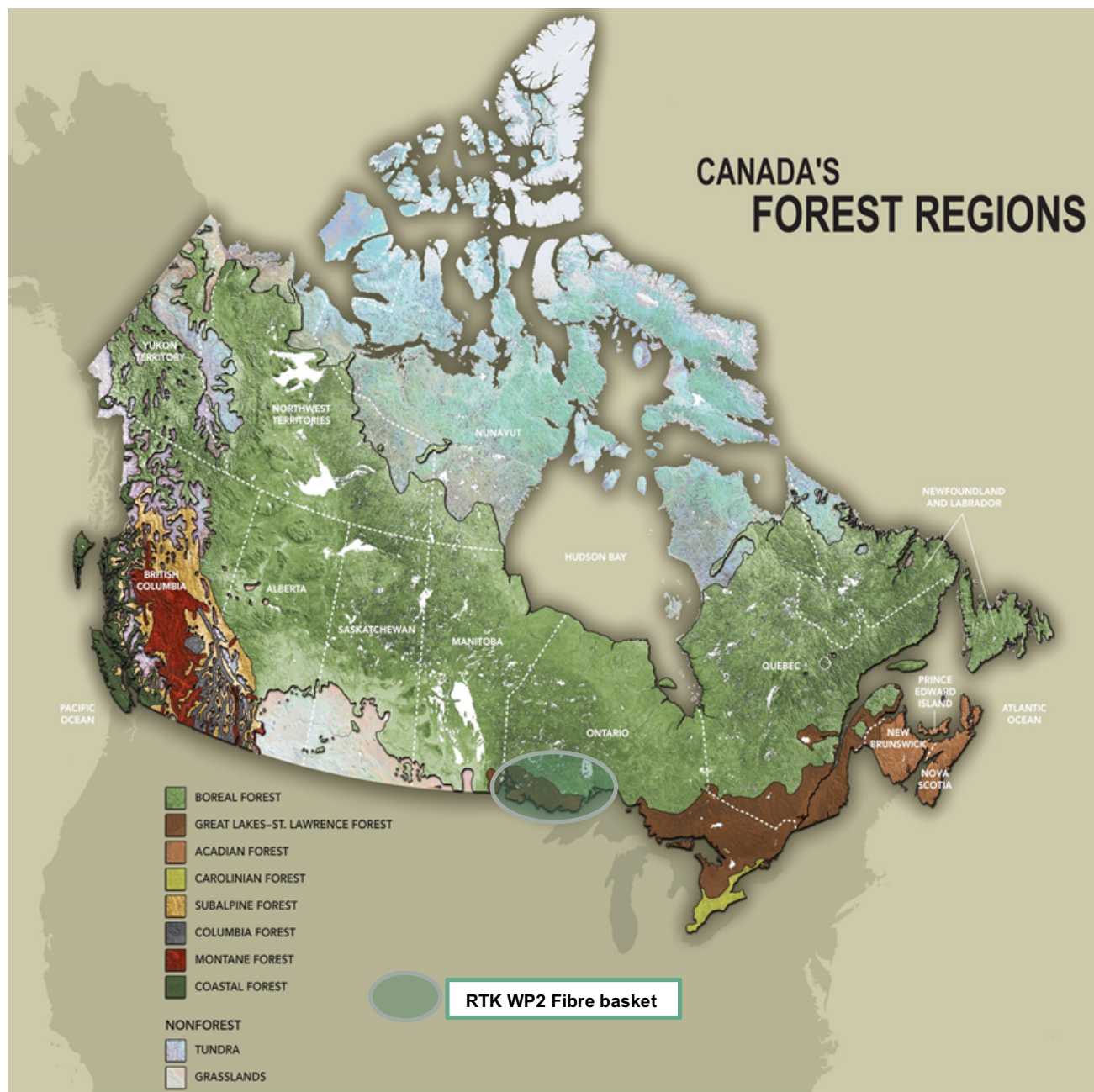
Weblink to SBR on Company website: www.rentechinc.com

Main (Initial) Evaluation	First Surveillance	Second Surveillance	Third Surveillance	Fourth Surveillance
X	☐	☐	☐	☐

2 Description of the Supply Base

2.1 General description

Rentech (RTK WP2 Canada, ULC) sources primary fibre within the province of Ontario and especially within the Canadian Boreal Forest and Great Lakes/St. Lawrence Forest Regions. Minnesota, US and Manitoba, Canada is also part of the supply area. The supply area is highlighted on the following map:



Source: <http://www.sfmcanada.org/en/canada-s-forests>

Boreal

(Source: <http://www.sfmcanada.org/en/canada-s-forests>)

“Canada shares 30% of the global boreal forest. The Canadian portion of the boreal region stretches from the Yukon and northeastern British Columbia across the northern parts of the Prairie Provinces, Quebec and Ontario to Labrador and Newfoundland. It forms a band of more than 1000 kilometres wide. This area is primarily publicly owned and is rich in natural resources. Encircling the earth's Northern Hemisphere just south of the Arctic Circle, this green mantle of mainly coniferous forest comprises about 16.6 million square kilometres, or roughly one-third of the planet's forested area.”

Great Lakes/St. Lawrence

(Source: <http://www.sfmcanada.org/en/canada-s-forests>)

“Among Canada's forest regions, the Great Lakes/St Lawrence area is second in size only to the boreal, covering southeastern Manitoba to the Gaspé Peninsula in Quebec. Trees in this region are a mix of coniferous and deciduous, with species such as the red pine, eastern white pine, yellow birch and eastern hemlock. Many boreal species may also be found here, in addition to beech, red oak, basswood, eastern white cedar, white elm and largetooth aspen.”

In 2015, 101,612 Green Metric tonnes (GMT) of fibre was supplied to Rentech's Atikokan facility. It is anticipated that the facility will require up to 250,000 GMT of fibre annually when it operates at full capacity. In comparison, other forest consumers (sawmills, OSB mills, and pulp / paper mills) within the region require from 50,000 to 1,500,000 GMT of fibre annually. The Rentech Atikokan Pellet Plant currently support about 25 full time jobs, and a further 130 jobs in the harvest and delivery of the required fibre supply.

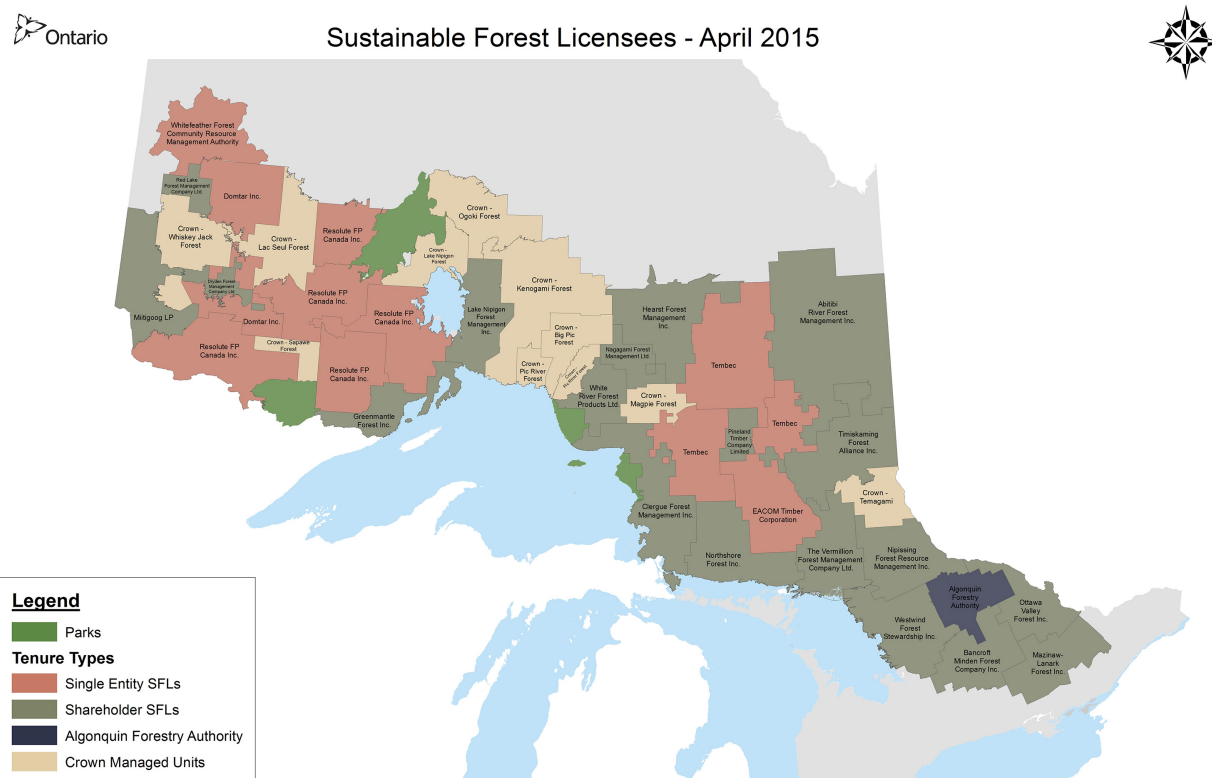
Table 1 - Overview of Rentech fibre supply

Biomass Feedstock types	Tonnage (data in metric tonnes as received) - 2015	SBP feedstock product groups	Number of suppliers	Species mix	Certification status
Branches, tops and bark	1,619.46 GMT	SBP-compliant Primary Feedstock	1	Refer to list below	100% certified
Long rotation (broadleaf)	39,211.63 GMT	SBP-compliant Primary Feedstock	9	Refer to list below	100% certified
Long rotation (broadleaf)	23,594.87 GMT	SBP-controlled Primary Feedstock	6	Refer to list below	0% certified
Long rotation (conifer)	15,151.02 GMT	SBP-compliant Primary Feedstock	8	Refer to list below	100% certified
Long rotation (conifer)	2,193.16 GMT	SBP-controlled Primary Feedstock	4	Refer to list below	0% certified
Saw dust and bark processing residue	20,377.48 GMT	SBP-controlled Secondary Feedstock	4	Refer to list below	0% certified
Total	102,147.62 GMT				

The majority of supply is sourced from Crown owned Forest Management Units in the Northeast and Northwest Regions of Ontario directly or indirectly through other forest product processing facilities. The company's fibre supply meets all strict applicable local, provincial and national legislation with respect to sustainable forest management (SFM).

<https://www.ontario.ca/page/sustainable-forest-management>
<https://www.ontario.ca/page/forest-management-policies>

<https://www.ontario.ca/environment-and-energy/sustainable-forest-licences>



Source: <https://www.ontario.ca/page/forestry-facts>

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Forest Management Units (FMU) (www.ontario.ca/page/list-management-units-and-map) are managed by Sustainable Forest License (SFL) holders under the authority of the Crown Forest Sustainability Act and issued by the

Ontario Ministry of Natural Resources and Forestry (MNRF). Fibre is harvested and delivered from approved harvest blocks identified in the Annual Work Schedules required by the Forest Management Plans of the Sustainable Forest Licenses in the table below.

Rentech Atikokan Facility is currently supplied from Forests from Ontario Northwest Region from Crown and Private Land contained within:

Table 2 - Forest Management Unit

Forests	Total Area (hectares)	Total Crown (hectares)	Total Patent (hectares)	Certification type
Sapawe Forest	301,536	299,873.7	1,662.3	N/A
Crossroute Forest	1,593,225	1,338,415	219,717	SFI
English River Forest	1,193,427	1,133,078	60,349	SFI
Dog River Matawin Forest	1,065,946	928,998	132,125	FSC/SFI
Wabigoon Forest	734,327.7	729,104.5	3,575.5	FSC/SFI
Dryden Forest	213,213.6	213,213.6	0	SFI
Whisky Jack Forest	1,053,515	1,053,515	0	N/A
Kenora Forest	1,137,862.9	1,137,862.9	0	SFI
Red Lake Forest	315,557.8	296,394	19,163.8	N/A
Trout Lake Forest	1,031,265.5	1,027,115.3	4,138.8	FSC/SFI
Lakehead Forest	766,811	459,131	300,584	SFI
Total	9,406,687.5	7,563,186	741,315.4	

Sources:

<http://www.efmp.lrc.gov.on.ca/eFMP/home.do>

<https://www.ontario.ca/page/crown-patents>

<https://www.ontario.ca/document/forest-certification>

Private Land

In addition to crown sources in Ontario, primary fibre is sourced from private land within the province. The land size ranges from 2 hectares to 10,000 hectares.

Private land owners must comply with all legal requirements including the Forestry Act (http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90f26_e.htm) and the Municipal Act (http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_01m25_e.htm). To encourage sustainable forest management, the Province of Ontario provides for managed forest tax incentives. Additional legislation pertains to the legality of wood and the transportation of all wood requires appropriate documentation that is monitored by the Ministry of Transportation.

Secondary Residual Supply

Through the procurement of secondary supply (sawdust, shavings, fines, or bark), the supply base area may further reach into Manitoba and the state of Minnesota in the US. This is not primary fibre directly delivered to Rentech facilities but may be indirectly sourced by primary fibre being utilized by residual suppliers who operate manufacturing facilities within Ontario.

Minnesota, USA

Forest harvesting in Minnesota is regulated under Chapter 89A. Sustainable Forest Resources (<https://www.revisor.leg.state.mn.us/statutes/?id=89A&view=chapter#stat.89A.05>) – its application to private lands is on a voluntary basis. Section 89A.04 Monitoring Subd. 2. speaks to ‘practices and compliance monitoring’ and Subd. 5 addresses citizen concerns, requiring the establishment of a process to accept comment for the public on negligent timber harvesting or forest management practices.

The AHEC study (<http://www.americanhardwood.org/sustainability/sustainable-forestry/seneca-creek-study/>) finds that timber theft is not a pervasive or systemic problem. The report concludes that there can be high confidence regarding adherence to national and state laws in the hardwood sector in the US, and it is reasonable to assume that the findings apply to the softwood sector as well.

Manitoba, Canada

The Forestry Act and the Forest Use and Management Regulation are the legislative tools under which forest management is undertaken in Manitoba. They are administered and enforced by Manitoba Conservation, Forestry Branch (<http://www.gov.mb.ca/conservation/forestry/index.html>) and include provisions for monitoring of timber harvesting. Natural Resource Officers conduct patrols to ensure compliance with the various Acts and Regulations including regular timber inspections.

Natural Resource Officer duties: https://www.gov.mb.ca/conservation/regoperations/pdf/career_fact_sheet_nro.pdf.

Wood Procurement Policy – All Sources

Rentech has a wood procurement policy endorsed by senior management which includes a clear commitment by the company to implement its best efforts to avoid trading and sourcing wood or wood fiber from the controversial categories for controlled wood. This includes a commitment to a FSC® Chain of custody system certified for the procurement of fibre. Rentech does not procure any uncontrolled wood as per FSC®. Rentech FSC® Certificate’s information is available at info.fsc.org.

The company does not procure any CITES or IUCN species in its fibre basket.

General description of the supply base - Ontario Forest overview

(Sources: <https://www.ontario.ca/page/forestry-facts> and <https://www.ontario.ca/page/forest-regions>)

Ontario covers 107,636,418 hectares (ha) in total area (266 million acres) with 87% of the Province publicly owned (93.2 million ha) including: 9.7 million ha within parks and protected areas and 83.5 million ha of other Crown managed lands. 13% of Ontario is Federal/First Nations or privately owned (14.4 million ha).

- 66% of Ontario is forested (71 million ha) - this is approximately 17% of Canada’s forests and 2% of the world’s forests
- 26 % of the Province is managed forest where all harvesting activities take place
- Ontario has approximately 85 billion trees
- There are over 7 billion cubic metres of growing stock (tree volume) in Ontario
- There are four broad forest regions in Ontario (Hudson Bay Lowlands, Boreal, Great Lakes-St. Lawrence, and Deciduous)
- 61% of Ontario’s forests have reached full development
- 9% of Ontario’s forests are within Parks and Protected areas (6.4 million ha)
- 81% of Ontario’s forests are on Crown land (public forest lands 57.5 million ha)

From April 1, 2011 to March 31, 2012, 44% of Ontario's Crown forest was managed for forestry (27.8 million ha). Annually, the total forest harvest area of the Province of Ontario is approximately 114,110 hectares with a forest harvest volume of 12.6 million cubic metres (m3) only about 50 % of the total annual allowable cut (AAC). The annual forest renewal is 109,040 hectares with 43,648 hectares regenerated by artificial means (tree planting and seeding) and 65,392 hectares regenerated naturally.

Annual report on forest management 2012-2013

<https://www.ontario.ca/page/annual-report-forest-management-2012-2013>

Ontario Forest industry

(Source: <https://www.ontario.ca/page/forestry-facts>)

- Value of forestry sector (revenue from sales): \$12.9 billion (2013)
 - Pulp and paper: \$6.7 billion (2013)
 - Sawmill, engineered wood and other wood product: \$3.4 billion (2013)
 - Furniture/kitchen cabinet manufacturing: \$1.8 billion (2013)
- Industry employees: 50,900 (2014); approximately 152,700 direct and indirect jobs (2014)
- Forest product exports: \$5.2 billion (2014)
- Crown charge payments by the forest industry (2014): \$97.5 million (includes \$64.6 million in forestry trust fund payments)
- Forest Resource or Sustainable Forest Licences issued to harvest forest resources for the 2014-15 fiscal year: 3,588

General description of the supply base - Canada

(Source: <http://www.sfmcanada.org/en/canada-s-forests>)

"Canada is the second largest country in the world with forest or other wooded land making up 40% of its 979 million hectares. Canada's forest cover represents 30% of the world's boreal forest and 10% of the world's overall forest cover.

Under Canada's Constitution, the federal and provincial/territorial governments have specific roles in the management of public forest lands. The federal government is responsible for matters relating to the national economy, trade, international relations, and federal lands and parks, and has constitutional, treaty, political and legal responsibilities for Aboriginal peoples. The provincial and territorial governments have legislative authority over the conservation and management of the forest resources on Crown lands. The laws and regulations governing forest practices on provincial and territorial public lands are among the most stringent in the world."

Additional information on the social, economic and environmental status of forests and forestry in Canada can be found here:

<http://www.nrcan.gc.ca/forests/report/16496>

2.2 Actions taken to promote certification amongst feedstock supplier

The company purchases FSC® Endorsed certified fibre or FSC® Controlled Wood. All wood that is included in the company's purchases falls within the FSC® CW risk assessment and is therefore Controlled Wood, no uncontrolled wood is purchased. As part of Rentech's sourcing processes, the company promotes the importance of sustainable forest management practices and FSC® certification through outreach programs to supplier. Rentech requires that all fibre sold by the wood supplier to the company is not from, nor will it not be involved in:

- illegal or unauthorized logging or the trade in illegal wood or forest products;
- violation of traditional and human rights in forestry operations;
- destruction of high conservation values in forestry operations;
- significant conversion of forests to plantation or non-forest use;
- introduction of genetically modified organisms in its forestry operations; and
- violation of the ILO Core Convention as defined in the ILO Declaration on Fundamental Principles and Rights at Work.

The company distributes its best management practices (BMP's) "Operations Handbook" with its purchase wood contracts when purchasing from an uncertified forest. For certified areas, the company supports encouraging the use of best management practices provided from the SFL holder. All suppliers are also subject to the company's supplier risk assessment protocols of the FSC® controlled wood program.

The company has appropriate internal management systems to ensure that all suppliers of wood fibre are monitored for compliance. This is determined through the individual supplier risk assessment, which determine whether onsite inspections are necessary and completed. All inspections are documented and the company files all inspections with each contract. Typical management systems include wood fibre scaling systems and databases, human resource policies and procedures, health and safety programs, wood procurement programs and procedures associated with FSC® Chain of Custody certification.

2.3 Final harvest sampling programme

Rentech follows all legal requirements and follows documented procedures in the **Forest compliance handbook** <https://www.ontario.ca/document/forest-compliance-handbook>. All information is reported in the Forest Operations Information Program (FOIP) in the form of compliance monitoring and reporting.

2.4 Flow diagram of feedstock inputs showing feedstock type

Not applicable.

2.5 Quantification of the Supply Base

Supply Base

- Total Supply Base area (ha): cumulative area of all Forest Management Unit (10) from Table above
8,639,876.5 hectares

- b. Tenure by type (ha):
440,731.4 ha - Privately owned
7,104,055 ha - Publicly owned

- c. Forest by type (ha):

Approx. 75% Boreal - 6,479,907.37 hectares
Approx. 25% Temperate – 2,159,969.13 hectares

- d. Forest by management type (ha): plantation/managed natural/natural
8,639,876.5 hectares - Managed natural and/or natural

- e. Certified forest by scheme (ha): (e.g. hectares of FSC® or PEFC-certified forest)
SFI: 7,308,918.3 ha
FSC®: 2,685,217.8 ha

Feedstock

- f. Total volume of Feedstock: tonnes or m3 - **101,612 Green Metric tonnes (GMT) of feedstock**

- g. Volume of primary feedstock from managed forest: tonnes or m³

Branches, tops and bark: 1,619.46 GMT

Long rotation (broadleaf): 62,806.5 GMT

Long rotation (conifer): 17,102.87 GMT

- h. List percentage of primary feedstock (g), by the following categories. Subdivide by SBP-approved Forest Management Schemes:
- Certified to an SBP-approved Forest Management Scheme: **68%**
 - Not certified to an SBP-approved Forest Management Scheme: **32%**

- i. List all species in primary feedstock, including scientific name

List of species included in Rentech supply base: Populus tremuloides (Trembling Aspen), Betula papyrifera (White Birch), Pinus banksiana (Jack Pine), Abies balsamea (Balsam Fir), Picea mariana (Black Spruce), Pinus strobus (White Pine), Pinus resinosa (Red Pine), Larix laricina (Larch) and, Picea glauca (White Spruce), Balsam Poplar (Populus balsamifera), Eastern White Cedar (Thuja , occidentalis), Larch (Larix laricina), Black Ash (Fraxinus nigra), Bur Oak (Quercus macrocarpa), Eastern Hemlock (Tsuga Canadensis), Ironwood (Ostrya virginiana), Largetooth aspen (Populus grandidentata), White ash (Fraxinus Americana), Yellow Birch (Betula alleghaniensis), Red Maple (Acer rubrum), Tamarack (Larix laricina). The company does not procured any raw materials from the list of species deemed threatened or endangered as classified by CITES.

- j. Volume of primary feedstock from primary forest
Not applicable.

- k. List percentage of primary feedstock from primary forest (j), by the following categories. Subdivide by SBP-approved Forest Management Schemes:

Not applicable.

- l. Volume of secondary feedstock: specify origin and type - the volume may be shown as a % of the figure in (f) if a compelling justification is provided

Saw dust and bark processing residue: 20,082.76 GMT

Supplier list: Local sawmills

- m. Volume of tertiary feedstock: **Not applicable.**

3 Requirement for a Supply Base Evaluation

SBE completed	SBE not completed
	X

4 Supply Base Evaluation

4.1 Scope

Not applicable.

4.2 Justification

Not applicable.

4.3 Results of Risk Assessment

Not applicable.

4.4 Results of Supplier Verification Programme

Not applicable.

4.5 Conclusion

Not applicable.

5 Supply Base Evaluation Process

Not applicable.

6 Stakeholder Consultation

Not applicable.

6.1 Response to stakeholder comments

Not applicable.

7 Overview of Initial Assessment of Risk

Not applicable.

8 Supplier Verification Programme

8.1 Description of the Supplier Verification Programme

Not applicable.

8.2 Site visits

Not applicable.

8.3 Conclusions from the Supplier Verification Programme

Not applicable.

9 Mitigation Measures

9.1 Mitigation measures

Not applicable.

9.2 Monitoring and outcomes

Not applicable.

10 Detailed Findings for Indicators

Not applicable.

11 Review of Report

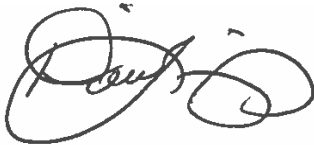
11.1 Peer review

Nate Ryant, a Registered Professional Forester (RPF) from NMR Resource Mgmt Ltd, a forest consulting company from British-Columbia, Canada peer reviewed this report on June 8, 2016.

11.2 Public or additional reviews

This report is publically available and accessible online at www.rentechinc.com.

12 Approval of Report

Approval of Supply Base Report by senior management			
Report Prepared by:	<i>Pierre-Olivier Morency</i>	<i>Commercial Manager</i>	<i>June 14, 2017</i>
	Name	Title	Date
The undersigned persons confirm that I/we are members of the organization's senior management and do hereby affirm that the contents of this evaluation report were duly acknowledged by senior management as being accurate prior to approval and finalization of the report.			
Report approved by:		<i>Director Operations Canada</i>	<i>June 14, 2017</i>
	Name	Title	Date
Report approved by:	<i>[name]</i>	<i>[title]</i>	<i>[date]</i>
	Name	Title	Date
Report approved by:	<i>[name]</i>	<i>[title]</i>	<i>[date]</i>
	Name	Title	Date

13 Updates

13.1 Significant changes in the Supply Base

Not applicable.

13.2 Effectiveness of previous mitigation measures

Not applicable.

13.3 New risk ratings and mitigation measures

Not applicable.

13.4 Actual figures for feedstock over the previous 12 months

Not applicable.

13.5 Projected figures for feedstock over the next 12 months

Not applicable.