WEYERHAEUSER COMPANY LIMITED
KENORA TIMBERSTRAND®
2012 TOXIC SUBSTANCE REDUCTION PLAN SUMMARY FOR Carbon Monoxide

Prepared in Accordance with
The Toxics Reduction Act, 2009 and
O.Reg. 455/09 General

December, 2013
Statement of Intent and Objectives of the Plan

Statement of Intent: The facility does not use Carbon Monoxide in the manufacture of TimberStrand®. This plan will not address the use of Carbon Monoxide. Carbon Monoxide is created as a natural by-product of burning and drying wood. The facility intends to minimize the creation of Carbon Monoxide.

Objective: The objective of the plan is to minimize the creation of Carbon Monoxide by monitoring the operations which create Carbon Monoxide and determine the best operating practices that will minimize Carbon Monoxide creation.

Target: The facility has set not targets to reduce the creation of Carbon Monoxide.

Description of Toxic Substances Found at Kenora TimberStrand®

There are 12 toxic substances that require development of a Toxic Substance Reduction Plan based on the criteria set out in the Toxics Reduction Act, 2009 and O.Reg. 455/09.

The substances are:

Carbon Monoxide
- As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

Phosphorus*
- A component of raw wood and carried through to the end product

Cadmium*
- A component of raw wood and carried through to the end product

Zinc*
- A component of raw wood and carried through to the end product
- As a component of an additive for a specific product produced

MDI*
- As an additive used as an adhesive to bind wood strands into a product

pMDI*
- As an additive used as an adhesive to bind wood strands into a product

Formaldehyde*
- As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

Methanol*
- As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

Nitrogen Dioxide*
Toxic Substance Reduction Plan Summary - Carbon Monoxide

- As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

Total Particulate Matter (TPM)*
- As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

Particulate Matter Less than 10 microns (PM\(_{10}\))*
- As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

Particulate Matter Less than 2.5 microns (PM\(_{2.5}\))*
- As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

Note*: Separate plans have been developed for each of the other toxic substances.

**Reduction Options to be Implemented**

None. Technical and economic analysis of options concluded that no additional technically and economically feasible option exists for reducing the creation of Carbon Monoxide beyond what the facility is already doing.

**Facility Information:**

Facility Name: Kenora TimberStrand®
NPRI Identification Number: 7658
O. Reg. 127 Number: 9016
Two Digit NAICS Code: 32
Four Digit NAICS Code: 3212
Six Digit NAICS Code: 321215
Number of Full-time Employees: 151
UTM Spatial Coordinates: Northing: 5515015N
Easting: 401989E
Zone: 15N

**Owner of the Facility Information:**

Name: Weyerhaeuser Company Limited
Address: 925 West Georgia St. Suite 500 Cathedral Place,
Vancouver, British Columbia
Postal Code: V6C 3L2
Phone Number: (604) 661-8037
Fax Number: (604) 687-2314

**Highest Ranking Employee at the Facility Information**

Name: Bill Candline
Title: Unit General Manager
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
**Postal Code:** P9N 3X8  
**Phone Number:** (807) 548-7153  
**Fax Number:** (807) 548-7134  
**Email:** bill.condline@weyerhaeuser.com

**Parent Company Information**  
**Legal Name of Parent Company:** Weyerhaeuser NR Company  
**Address of Parent Company:** PO Box 9777 Federal Way, Washington USA 98063-9777  
**Percentage of Facility Owned by Company:** 100%  
**CCRA Business Number:** 103440624

**Toxic Substances for Which Facility Must Prepare Plan:**

<table>
<thead>
<tr>
<th>Substance 1 (covered by this plan):</th>
<th>Carbon Monoxide</th>
<th>CAS Number: 630-08-0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance 2 (covered in a different plan):</td>
<td>Total Particulate Matter (TPM)</td>
<td>CAS Number: NA</td>
</tr>
<tr>
<td>Substance 3 (covered in a different plan):</td>
<td>Phosphorus</td>
<td>CAS Number: NA</td>
</tr>
<tr>
<td>Substance 4 (covered in a different plan):</td>
<td>Cadmium</td>
<td>CAS Number: NA-03</td>
</tr>
<tr>
<td>Substance 5 (covered in a different plan):</td>
<td>Zinc</td>
<td>CAS Number: NA-14</td>
</tr>
<tr>
<td>Substance 6 (covered in a different plan):</td>
<td>Formaldehyde</td>
<td>CAS Number: 50-00-0</td>
</tr>
<tr>
<td>Substance 7 (covered in a different plan):</td>
<td>Methanol</td>
<td>CAS Number: 67-56-1</td>
</tr>
<tr>
<td>Substance 8 (covered in a different plan):</td>
<td>MDI</td>
<td>CAS Number: 101-68-8</td>
</tr>
<tr>
<td>Substance 9 (covered in a different plan):</td>
<td>Nitrogen Dioxide</td>
<td>CAS Number: 11104-93-1</td>
</tr>
<tr>
<td>Substance 10 (covered in a different plan):</td>
<td>pMDI</td>
<td>CAS Number: 9016-87-9</td>
</tr>
<tr>
<td>Substance 11 (covered in a different plan):</td>
<td>Particulate Matter &lt; 10 Microns (PM$_{10}$)</td>
<td>CAS Number: NA</td>
</tr>
<tr>
<td>Substance 12 (covered in a different plan):</td>
<td>Particulate Matter &lt; 2.5 Microns (PM$_{2.5}$)</td>
<td>CAS Number: NA</td>
</tr>
</tbody>
</table>
Toxic Substance Reduction Plan Summary - Carbon Monoxide

Plan Contacts:

Person Coordinating the Preparation of the Plan:
Name: R. Cecil Burns
Position: Environmental Coordinator
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
Postal Code: P9N 3X8
Phone Number: (807) 548-7210
Fax Number: (807) 548-7200
Email: cecil.burns@weyerhaeuser.com

Person Who Prepared the Plan:
Name: R. Cecil Burns
Position: Environmental Coordinator
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
Postal Code: P9N 3X8
Phone Number: (807) 548-7210
Fax Number: (807) 548-7200
Email: cecil.burns@weyerhaeuser.com

Public Contact:
Name: Wayne Roznowsky
Position: Manager Public Affairs
Address: Postal Bag 1020, Grande Prairie, Alberta
Postal Code: T8V 3A9
Phone Number: (780) 539-8832
Fax Number: (780) 5390-8004
Email: wayne.roznowsky@weyerhaeuser.com

Technical Contact:
Name: R. Cecil Burns
Position: Environmental Coordinator
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
Postal Code: P9N 3X8
Phone Number: (807) 548-7210
Fax Number: (807) 548-7200
Email: cecil.burns@weyerhaeuser.com

Planner Who Provided Recommendations:
Name: R. Cecil Burns
Planner Licence #: TSRP0067

Plan Summary Statement
This plan summary accurately reflects the content of the Toxic Substance Reduction Plan for Carbon Monoxide, prepared by Weyerhaeuser Kenora TimberStrand, dated December, 2013.
Toxic Substance Reduction Plan Summary - Carbon Monoxide

Certification by Highest Ranking Employee

As of December 18, 2013, I, Bill Candline, certify that I have read the Toxic Substance Reduction Plan for the Toxic Substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

Carbon Monoxide

________________________________________
Bill Candline
Unit General Manager
Weyerhaeuser Kenora TimberStrand

Certification by Licensed Planner

As of December 18, 2013, I, R. Cecil Burns, certify that I am familiar with the processes at the Weyerhaeuser Kenora TimberStrand facility that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraph 7 iii, iv and v of subsection 4(1) of the Toxics Reduction Act, 2009 that are set out in the plan dated December, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Carbon Monoxide

_______________________________________
R. Cecil Burns, CET, EP, CMVP, LTSRP.
(Planner Licence # TSRP0067)
Weyerhaeuser Kenora TimberStrand
WEYERHAEUSER COMPANY LIMITED
KENORA TIMBERSTRAND®
2012 TOXIC SUBSTANCE REDUCTION PLAN SUMMARY FOR
Methylenebis Phenylisocyanate (MDI)

Prepared in Accordance with
The Toxics Reduction Act, 2009 and
O.Reg. 455/09 General
December, 2013
**Statement of Intent and Objectives of the Plan**

**Statement of Intent:** The facility uses MDI in the manufacture of TimberStrand®. This plan will address the use of MDI. MDI is used as an adhesive to bond wood fibres to form the product known as TimberStrand. The plan intends to minimize the use of MDI.

**Objective:** The objective of the plan is to minimize the use of MDI.

**Target:** The facility has not set targets to reduce the use of MDI.

**Description of Toxic Substances Found at Kenora TimberStrand®**

There are 12 toxic substances that require development of a Toxic Substance Reduction Plan based on the criteria set out in the Toxics Reduction Act, 2009 and O.Reg. 455/09.

The substances are:

- **MDI**
  - As an additive used as an adhesive to bind wood strands into a product

- **Carbon Monoxide**
  - As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

- **Phosphorus**
  - A component of raw wood and carried through to the end product

- **Cadmium**
  - A component of raw wood and carried through to the end product

- **Zinc**
  - A component of raw wood and carried through to the end product
  - As a component of an additive for a specific product produced

- **pMDI**
  - As an additive used as an adhesive to bind wood strands into a product

- **Formaldehyde**
  - As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

- **Methanol**
  - As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

- **Nitrogen Dioxide**
  - As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

- **Total Particulate Matter (TPM)**
Toxic Substance Reduction Plan Summary - MDI

- As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

Particulate Matter Less than 10 microns (PM_{10})*
- As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

Particulate Matter Less than 2.5 microns (PM_{2.5})*
- As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

Note*: Separate plans have been developed for each of the other toxic substances.

Options to be Implemented

None. Technical and economic analysis of options concluded that no technically and economically feasible options beyond what the facility currently uses exist for reducing the use or release of MDI.

Facility Information:

Facility Name: Kenora TimberStrand®
NPRI Identification Number: 7658
O. Reg. 127 Number: 9016
Two Digit NAICS Code: 32
Four Digit NAICS Code: 3212
Six Digit NAICS Code: 321215
Number of Full-time Employees: 151
UTM Spatial Coordinates: Northing: 5515015N
Easting: 401989E
Zone: 15N

Owner of the Facility Information:

Name: Weyerhaeuser Company Limited
Address: 925 West Georgia St. Suite 500 Cathedral Place, Vancouver, British Columbia
Postal Code: V6C 3L2
Phone Number: (604) 661-8037
Fax Number: (604) 687-2314

Highest Ranking Employee at the Facility Information

Name: Bill Candline
Title: Unit General Manager
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
Postal Code: P9N 3X8
Phone Number: (807) 548-7153
Fax Number: (807) 548-7134
Email: bill.candline@weyerhaeuser.com
**Toxic Substance Reduction Plan Summary - MDI**

**Parent Company Information**
Legal Name of Parent Company: Weyerhaeuser NR Company
Address of Parent Company: PO Box 9777 Federal Way, Washington USA 98063-9777
Percentage of Facility Owned by Company: 100%
CCRA Business Number: 103440624

**Toxic Substances for Which Facility Must Prepare Plan:**

<table>
<thead>
<tr>
<th>Substance 1 (covered in a different plan): Carbon Monoxide</th>
<th>CAS Number: 630-08-0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance 2 (covered in a different plan): Total Particulate Matter (TPM)</td>
<td>CAS Number: NA</td>
</tr>
<tr>
<td>Substance 3 (covered in a different plan): Phosphorus</td>
<td>CAS Number: NA</td>
</tr>
<tr>
<td>Substance 4 (covered in a different plan): Cadmium</td>
<td>CAS Number: NA-03</td>
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<td>Substance 5 (covered in a different plan): Zinc</td>
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<td>CAS Number: 50-00-0</td>
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<td>Substance 7 (covered in a different plan): Methanol</td>
<td>CAS Number: 67-56-1</td>
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<tr>
<td>Substance 8 (covered in this plan): MDI</td>
<td>CAS Number: 101-68-8</td>
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<td>Substance 9 (covered in a different plan): Nitrogen Dioxide</td>
<td>CAS Number: 11104-93-1</td>
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<td>Substance 10 (covered by a different plan): pMDI</td>
<td>CAS Number: 9016-87-9</td>
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<td>Substance 11 (covered in a different plan): Particulate Matter &lt; 10 Microns (PM&lt;sub&gt;10&lt;/sub&gt;)</td>
<td>CAS Number: NA</td>
</tr>
<tr>
<td>Substance 12 (covered in a different plan): Particulate Matter &lt; 2.5 Microns (PM&lt;sub&gt;2.5&lt;/sub&gt;)</td>
<td>CAS Number: NA</td>
</tr>
</tbody>
</table>

**Plan Contacts:**

**Person Coordinating the Preparation of the plan:**
Name: R. Cecil Burns
Position: Environmental Coordinator
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
Toxic Substance Reduction Plan Summary - MDI

Postal Code: P9N 3X8
Phone Number: (807) 548-7210
Fax Number: (807) 548-7200
Email: cecil.burns@weyerhaeuser.com

Person Who Prepared the Plan:
Name: R. Cecil Burns
Position: Environmental Coordinator
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
Postal Code: P9N 3X8
Phone Number: (807) 548-7210
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Public Contact:
Name: Wayne Roznowsky
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Address: Postal Bag 1020, Grande Prairie, Alberta
Postal Code: T8V 3A9
Phone Number: (780) 539-8832
Fax Number: (780) 5390-8004
Email: wayne.roznowsky@weyerhaeuser.com

Technical Contact:
Name: R. Cecil Burns
Position: Environmental Coordinator
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
Postal Code: P9N 3X8
Phone Number: (807) 548-7210
Fax Number: (807) 548-7200
Email: cecil.burns@weyerhaeuser.com

Planner Who Provided Recommendations:
Name: R. Cecil Burns
Planner Licence #: TSRP0067

Plan Summary Statement

This plan summary accurately reflects the content of the Toxic Substance Reduction Plan for MDI, prepared by Weyerhaeuser Kenora TimberStrand, dated December, 2013.
Certification by Highest Ranking Employee

As of December 18, 2013, I, Bill Candline, certify that I have read the Toxic Substance Reduction Plan for the Toxic Substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

MDI

________________________________________
Bill Candline
Unit General Manager
Weyerhaeuser Kenora TimberStrand

Certification by Licensed Planner

As of December 18, 2013, I, R. Cecil Burns, certify that I am familiar with the processes at the Weyerhaeuser Kenora TimberStrand facility that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraph 7 iii, iv and v of subsection 4(1) of the Toxics Reduction Act, 2009 that are set out in the plan dated December, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

MDI

_______________________________________
R. Cecil Burns, CET, EP, CMVP, LTSRP.
(Planner Licence # TSRP0067)
Weyerhaeuser Kenora TimberStrand
WEYERHAEUSER COMPANY LIMITED
KENORA TIMBERSTRAND®
2012 TOXIC SUBSTANCE REDUCTION PLAN SUMMARY FOR Nitrogen Dioxide

Prepared in Accordance with
The Toxics Reduction Act, 2009 and O.Reg. 455/09 General
December, 2013
Statement of Intent and Objectives of the Plan

Statement of Intent: The facility does not use Nitrogen Dioxide in the manufacture of TimberStrand®. This plan will not address the use of Nitrogen Dioxide. Nitrogen Dioxide is created as a natural by-product of burning and drying wood. The plan intends to minimize the creation of Nitrogen Dioxide.

Objective: The objective of the plan is to minimize the creation of Nitrogen Dioxide by monitoring the operations which create Nitrogen Dioxide and determine the best operating practices that will minimize Nitrogen Dioxide creation.

Target: The facility has set no targets to reduce the creation of Nitrogen Dioxide.

Description of Toxic Substances Found at Kenora TimberStrand®

There are 12 toxic substances that require development of a Toxic Substance Reduction Plan based on the criteria set out in the Toxics Reduction Act, 2009 and O.Reg. 455/09.

The substances are:

Nitrogen Dioxide
- As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

Phosphorus*
- A component of raw wood and carried through to the end product

Cadmium*
- A component of raw wood and carried through to the end product

Zinc*
- A component of raw wood and carried through to the end product
- As a component of an additive for a specific product produced

MDI*
- As an additive used as an adhesive to bind wood strands into a product

pMDI*
- As an additive used as an adhesive to bind wood strands into a product

Formaldehyde*
- As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

Methanol*
- As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

Carbon Monoxide*
Toxic Substance Reduction Plan Summary - Nitrogen Dioxide

- As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

Total Particulate Matter (TPM)*
- As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

Particulate Matter Less than 10 microns (PM\(_{10}\))*
- As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

Particulate Matter Less than 2.5 microns (PM\(_{2.5}\))*
- As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

Note*: Separate plans have been developed for each of the other toxic substances.

**Reduction Options to be Implemented**

None. Technical and economic analysis of options concluded that no technically and economically feasible option exists for reducing the creation of Nitrogen Dioxide.

**Facility Information:**

Facility Name: Kenora TimberStrand®
NPRI Identification Number: 7658
O. Reg. 127 Number: 9016
Two Digit NAICS Code: 32
Four Digit NAICS Code: 3212
Six Digit NAICS Code: 321215
Number of Full-time Employees: 151
UTM Spatial Coordinates:
Northing: 5515015N
Easting: 401989E
Zone: 15N

**Owner of the Facility Information:**

Name: Weyerhaeuser Company Limited
Address: 925 West Georgia St. Suite 500 Cathedral Place, Vancouver, British Columbia
Postal Code: V6C 3L2
Phone Number: (604) 661-8037
Fax Number: (604) 687-2314

**Highest Ranking Employee at the Facility Information**

Name: Bill Candline
Title: Unit General Manager
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
Toxic Substance Reduction Plan Summary - Nitrogen Dioxide

Postal Code: P9N 3X8
Phone Number: (807) 548-7153
Fax Number: (807) 548-7134
Email: bill.condline@weyerhaeuser.com

Parent Company Information
Legal Name of Parent Company: Weyerhaeuser NR Company
Address of Parent Company: PO Box 9777 Federal Way, Washington
USA 98063-9777
Percentage of Facility Owned by Company: 100%
CCRA Business Number: 103440624

### Toxic Substances for Which Facility Must Prepare Plan:

<table>
<thead>
<tr>
<th>Substance 1 (covered in this plan): Nitrogen Dioxide</th>
<th>CAS Number: 11104-93-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance 2 (covered in a different plan): Total Particulate Matter (TPM)</td>
<td>CAS Number: NA</td>
</tr>
<tr>
<td>Substance 3 (covered in a different plan): Phosphorus</td>
<td>CAS Number: NA</td>
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<td>Substance 9 (covered in a different plan): Carbon Monoxide</td>
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<td>Substance 12 (covered in a different plan): Particulate Matter &lt; 2.5 Microns (PM&lt;sub&gt;2.5&lt;/sub&gt;)</td>
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Plan Contacts:

Person Coordinating the Preparation of the plan:
Name: R. Cecil Burns
Position: Environmental Coordinator
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
Postal Code: P9N 3X8
Phone Number: (807) 548-7210
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Email: cecil.burns@weyerhaeuser.com

Person Who Prepared the Plan:
Name: R. Cecil Burns
Position: Environmental Coordinator
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
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Phone Number: (807) 548-7210
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Name: Wayne Roznowsky
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Technical Contact:
Name: R. Cecil Burns
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Postal Code: P9N 3X8
Phone Number: (807) 548-7210
Fax Number: (807) 548-7200
Email: cecil.burns@weyerhaeuser.com

Planner Who Provided Recommendations:
Name: R. Cecil Burns
Planner Licence #: TSRP0067

Plan Summary Statement
This plan summary accurately reflects the content of the Toxic Substance Reduction Plan for Nitrogen Dioxide, prepared by Weyerhaeuser Kenora TimberStrand, dated December, 2013.
Certification by Highest Ranking Employee

As of December 18, 2013, I, Bill Candline, certify that I have read the Toxic Substance Reduction Plan for the Toxic Substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxic Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

Nitrogen Dioxide

________________________________________
Bill Candline
Unit General Manager
Weyerhaeuser Kenora TimberStrand

Certification by Licensed Planner

As of December 18, 2013, I, R. Cecil Burns, certify that I am familiar with the processes at the Weyerhaeuser Kenora TimberStrand facility that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraph 7 iii, iv and v of subsection 4(1) of the Toxic Reduction Act, 2009 that are set out in the plan dated December, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Nitrogen Dioxide

________________________________________
R. Cecil Burns, CET, EP, CMVP, LTSRP.
(Planner Licence # TSRP0067)
Weyerhaeuser Kenora TimberStrand
WEYERHAEUSER COMPANY LIMITED
KENORA TIMBERSTRAND®
2012 TOXIC SUBSTANCE REDUCTION PLAN SUMMARY FOR Phosphorus

Prepared in Accordance with
The Toxics Reduction Act, 2009 and
O.Reg. 455/09 General

December, 2013
Statement of Intent and Objectives of the Plan

Statement of Intent: Phosphorus is an element that is a naturally occurring component of the raw wood used to manufacture TimberStrand®. It is not created in any part of the manufacturing process but is “used” because it is present as a component of wood, biomass and ash. This plan addresses the “use” of Phosphorus but will not address its creation.

Objective: Where possible the facility plans to minimize the amount of Phosphorus that is disposed of offsite to landfill through efficient conversion of raw materials into TimberStrand®.

Target: The facility has not set any targets for reduction in the use or creation of Phosphorus.

Description of Toxic Substances Found at Kenora TimberStrand®

There are 12 toxic substances that require development of a Toxic Substance Reduction Plan based on the criteria set out in the Toxics Reduction Act, 2009 and O.Reg. 455/09.

The substances are:

Carbon Monoxide*
  • As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

Phosphorus
  • A component of raw wood and carried through to the end product

Cadmium*
  • A component of raw wood and carried through to the end product

Zinc*
  • A component of raw wood and carried through to the end product
  • As a component of an additive for a specific product produced

MDI*
  • As an additive used as an adhesive to bind wood strands into a product

pMDI*
  • As an additive used as an adhesive to bind wood strands into a product

Formaldehyde*
  • As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

Methanol*
  • As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

Nitrogen Dioxide*
Toxic Substance Reduction Plan Summary - Phosphorus

- As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

**Total Particulate Matter (TPM)**

- As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

**Particulate Matter Less than 10 microns (PM_{10})**

- As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

**Particulate Matter Less than 2.5 microns (PM_{2.5})**

- As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

Note*: Separate plans have been developed for each of the other toxic substances.

**Options to be Implemented**

None. Phosphorus is an element and is naturally occurring in all trees. The amount of Phosphorus present in any tree is dependent on the geology and climate of where the tree grows. Because Phosphorus is an element it cannot be created or destroyed and in this facility it is carried through the processes unchanged. Products created and residuals from the heat-energy and manufacturing processes carry with them the residual amounts of Phosphorus from the source. Every effort is made to reduce the amount of waste produced that is transferred to landfill or discharged as particulate to the atmosphere.

**Facility Information:**

Facility Name: Kenora TimberStrand®
NPRI Identification Number: 7658
O. Reg. 127 Number: 9016
Two Digit NAICS Code: 32
Four Digit NAICS Code: 3212
Six Digit NAICS Code: 321215
Number of Full-time Employees: 151
UTM Spatial Coordinates: Northing: 5515015N
Easting: 401989E
Zone: 15N

**Owner of the Facility Information:**

Name: Weyerhaeuser Company Limited
Address: 925 West Georgia St. Suite 500 Cathedral Place,
Vancouver, British Columbia
Postal Code: V6C 3L2
Phone Number: (604) 661-8037
Fax Number: (604) 687-2314
Highest Ranking Employee at the Facility Information
Name: Bill Candline
Title: Unit General Manager
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
Postal Code: P9N 3X8
Phone Number: (807) 548-7153
Fax Number: (807) 548-7134
Email: bill.condline@weyerhaeuser.com

Parent Company Information
Legal Name of Parent Company: Weyerhaeuser NR Company
Address of Parent Company: PO Box 9777 Federal Way, Washington USA 98063-9777
Percentage of Facility Owned by Company: 100%
CCRA Business Number: 103440624

Toxic Substances for Which Facility Must Prepare Plan:
Substance 1 (covered in a different plan): Carbon Monoxide
CAS Number: 630-08-0
Substance 2 (covered in a different plan): Total Particulate Matter (TPM)
CAS Number: NA
Substance 3 (covered by this plan): Phosphorus
CAS Number: NA
Substance 4 (covered in a different plan): Cadmium
CAS Number: NA-03
Substance 5 (covered in a different plan): Zinc
CAS Number: NA-14
Substance 6 (covered in a different plan): Formaldehyde
CAS Number: 50-00-0
Substance 7 (covered in a different plan): Methanol
CAS Number: 67-56-1
Substance 8 (covered in a different plan): MDI
CAS Number: 101-68-8
Substance 9 (covered in a different plan): Nitrogen Dioxide
CAS Number: 11104-93-1
Substance 10 (covered in a different plan): pMDI
CAS Number: 9016-87-9
Substance 11 (covered in a different plan): Particulate Matter < 10 Microns (PM_{10})
Toxic Substance Reduction Plan Summary - Phosphorus

CAS Number: NA
Substance 12 (covered in a different plan): Particulate Matter < 2.5 Microns (PM$_{2.5}$)
CAS Number: NA

Plan Contacts:

**Person Coordinating the Preparation of the Plan:**
Name: R. Cecil Burns
Position: Environmental Coordinator
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
Postal Code: P9N 3X8
Phone Number: (807) 548-7210
Fax Number: (807) 548-7200
Email: cecil.burns@weyerhaeuser.com

**Person Who Prepared the Plan:**
Name: R. Cecil Burns
Position: Environmental Coordinator
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
Postal Code: P9N 3X8
Phone Number: (807) 548-7210
Fax Number: (807) 548-7200
Email: cecil.burns@weyerhaeuser.com

**Public Contact:**
Name: Wayne Roznowsky
Position: Manager Public Affairs
Address: Postal Bag 1020, Grande Prairie, Alberta
Postal Code: T8V 3A9
Phone Number: (780) 539-8832
Fax Number: (780) 5390-8004
Email: wayne.roznowsky@weyerhaeuser.com

**Technical Contact:**
Name: R. Cecil Burns
Position: Environmental Coordinator
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
Postal Code: P9N 3X8
Phone Number: (807) 548-7210
Fax Number: (807) 548-7200
Email: cecil.burns@weyerhaeuser.com

**Planner Who Provided Recommendations:**
Name: R. Cecil Burns
Planner Licence #: TSRP0067

**Plan Summary Statement**
This plan summary accurately reflects the content of the Toxic Substance Reduction Plan for Phosphorus, prepared by Weyerhaeuser Kenora TimberStrand, dated December, 2013.
Certification by Highest Ranking Employee

As of December 18, 2013, I, Bill Candline, certify that I have read the Toxic Substance Reduction Plan for the Toxic Substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

Phosphorus

________________________________________
Bill Candline  
Unit General Manager  
Weyerhaeuser Kenora TimberStrand

Certification by Licensed Planner

As of December 18, 2013, I, R. Cecil Burns, certify that I am familiar with the processes at the Weyerhaeuser Kenora TimberStrand facility that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraph 7 iii, iv and v of subsection 4(1) of the Toxics Reduction Act, 2009 that are set out in the plan dated December, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Phosphorus

_______________________________________
R. Cecil Burns, CET, EP, CMVP, LTSRP.  
(Planner Licence # TSRP0067)  
Weyerhaeuser Kenora TimberStrand
WEYERHAEUSER COMPANY LIMITED
KENORA TIMBERSTRAND®
2012 TOXIC SUBSTANCE REDUCTION PLAN SUMMARY FOR
Particulate Matter <10 microns ($PM_{10}$)
Prepared in Accordance with
The Toxics Reduction Act, 2009 and
O.Reg. 455/09 General
December, 2013
Statement of Intent and Objectives of the Plan

Statement of Intent: The facility creates and uses PM\textsubscript{10} in the manufacture of TimberStrand\textsuperscript{®}. This plan will address the creation and use of PM\textsubscript{10}. PM\textsubscript{10} is created as a by-product of wood processing and generated by truck traffic on site roads. PM\textsubscript{10} is used as a biomass fuel. The plan does not intend to reduce the creation or use of PM\textsubscript{2.5}.

Objective: The objective of the plan is to minimize the release of PM\textsubscript{10} offsite.

Target: The facility has set not targets to reduce the creation or use of PM\textsubscript{10}.
Description of Toxic Substances Found at Kenora TimberStrand®

There are 12 toxic substances that require development of a Toxic Substance Reduction Plan based on the criteria set out in the Toxics Reduction Act, 2009 and O.Reg. 455/09.

The substances are:

- **Nitrogen Dioxide***
  - As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

- **Phosphorus***
  - A component of raw wood and carried through to the end product

- **Cadmium***
  - A component of raw wood and carried through to the end product

- **Zinc***
  - A component of raw wood and carried through to the end product
  - As a component of an additive for a specific product produced

- **MDI***
  - As an additive used as an adhesive to bind wood strands into a product

- **pMDI***
  - As an additive used as an adhesive to bind wood strands into a product

- **Formaldehyde***
  - As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

- **Methanol***
  - As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

- **Carbon Monoxide***
  - As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

- **Total Particulate Matter (TPM)**
  - As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

- **Particulate Matter Less than 10 microns (PM$_{10}$)**
  - As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

- **Particulate Matter Less than 2.5 microns (PM$_{2.5}$)**
Toxic Substance Reduction Plan Summary – \((PM_{10})\)

- As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

Note*: Separate plans have been developed for each of the other toxic substances.

Reduction Options to be Implemented

None. The facility does not intend to implement any of the identified options beyond those currently in place.

Facility Information:

Facility Name: Kenora TimberStrand®
NPRI Identification Number: 7658
O. Reg. 127 Number: 9016
Two Digit NAICS Code: 32
Four Digit NAICS Code: 3212
Six Digit NAICS Code: 321215
Number of Full-time Employees: 151
UTM Spatial Coordinates: Northing: 5515015N
Easting: 401989E
Zone: 15N

Owner of the Facility Information:

Name: Weyerhaeuser Company Limited
Address: 925 West Georgia St. Suite 500 Cathedral Place,
Vancouver, British Columbia
Postal Code: V6C 3L2
Phone Number: (604) 661-8037
Fax Number: (604) 687-2314

Highest Ranking Employee at the Facility Information

Name: Bill Candline
Title: Unit General Manager
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
Postal Code: P9N 3X8
Phone Number: (807) 548-7153
Fax Number: (807) 548-7134
Email: bill.condline@weyerhaeuser.com

Parent Company Information

Legal Name of Parent Company: Weyerhaeuser NR Company
Address of Parent Company: PO Box 9777 Federal Way, Washington USA 98063-9777
Percentage of Facility Owned by Company: 100%
CCRA Business Number: 103440624

Toxic Substances for Which Facility Must Prepare Plan:
Substance 1 (covered in a different plan): Carbon Monoxide
CAS Number: 630-08-0

Substance 2 (covered in a different plan): Total Particulate Matter (TPM)
CAS Number: NA

Substance 3 (covered in a different plan): Phosphorus
CAS Number: NA

Substance 4 (covered in a different plan): Cadmium
CAS Number: NA-03

Substance 5 (covered in a different plan): Zinc
CAS Number: NA-14

Substance 6 (covered in a different plan): Formaldehyde
CAS Number: 50-00-0

Substance 7 (covered in a different plan): Methanol
CAS Number: 67-56-1

Substance 8 (covered in a different plan): MDI
CAS Number: 101-68-8

Substance 9 (covered in a different plan): Nitrogen Dioxide
CAS Number: 1104-93-1

Substance 10 (covered in a different plan): pMDI
CAS Number: 9016-87-9

Substance 11 (covered by this plan): Particulate Matter < 10 Microns (PM_{10})
CAS Number: NA

Substance 12 (covered in a different plan): Particulate Matter < 2.5 Microns (PM_{2.5})
CAS Number: NA

Plan Contacts:

**Person Coordinating the Preparation of the plan:**
Name: R. Cecil Burns
Position: Environmental Coordinator
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
Postal Code: P9N 3X8
Phone Number: (807) 548-7210
Fax Number: (807) 548-7200
Email: cecil.burns@weyerhaeuser.com

**Person Who Prepared the Plan:**
Name: R. Cecil Burns
Position: Environmental Coordinator
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
Toxic Substance Reduction Plan Summary – \((PM_{10})\)

Postal Code: P9N 3X8  
Phone Number: (807) 548-7210  
Fax Number: (807) 548-7200  
Email: cecil.burns@weyerhaeuser.com

**Public Contact:**
Name: Wayne Roznowsky  
Position: Manager Public Affairs  
Address: Postal Bag 1020, Grande Prairie, Alberta  
Postal Code: T8V 3A9  
Phone Number: (780) 539-8832  
Fax Number: (780) 5390-8004  
Email: wayne.roznowsky@weyerhaeuser.com

**Technical Contact:**
Name: R. Cecil Burns  
Position: Environmental Coordinator  
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario  
Postal Code: P9N 3X8  
Phone Number: (807) 548-7210  
Fax Number: (807) 548-7200  
Email: cecil.burns@weyerhaeuser.com

**Planner Who Provided Recommendations:**
Name: R. Cecil Burns  
Planner Licence #: TSRP0067

**Plan Summary Statement**

This plan summary accurately reflects the content of the Toxic Substance Reduction Plan for \(PM_{10}\), prepared by Weyerhaeuser Kenora TimberStrand, dated December, 2013.
Certification by Highest Ranking Employee

As of December 18, 2013, I, Bill Candline, certify that I have read the Toxic Substance Reduction Plan for the Toxic Substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

PM$_{10}$

________________________________________
Bill Candline
Unit General Manager
Weyerhaeuser Kenora TimberStrand

Certification by Licensed Planner

As of December 18, 2013, I, R. Cecil Burns, certify that I am familiar with the processes at the Weyerhaeuser Kenora TimberStrand facility that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraph 7 iii, iv and v of subsection 4(1) of the Toxics Reduction Act, 2009 that are set out in the plan dated December, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

PM$_{10}$

_______________________________________
R. Cecil Burns, CET, EP, CMVP, LTSRP.
(Planner Licence # TSRP0067)
Weyerhaeuser Kenora TimberStrand
WEYERHAEUSER COMPANY LIMITED
KENORA TIMBERSTRAND®
2012 TOXIC SUBSTANCE REDUCTION PLAN SUMMARY FOR
Particulate Matter <2.5 microns (PM$_{2.5}$)

Prepared in Accordance with
The Toxics Reduction Act, 2009 and
O.Reg. 455/09 General

December, 2013
Statement of Intent and Objectives of the Plan

Statement of Intent: The facility creates and uses PM$_{2.5}$ in the manufacture of TimberStrand®. This plan will address the creation and use of PM$_{2.5}$. PM$_{2.5}$ is created as a by-product of wood processing and generated by truck traffic on site roads. PM$_{2.5}$ is used as a biomass fuel. The plan does not intend to reduce the creation or use of PM$_{2.5}$.

Objective: The objective of the plan is to minimize the release of PM$_{2.5}$ offsite.

Target: The facility has set not targets to reduce the creation or use of PM$_{2.5}$.
Description of Toxic Substances Found at Kenora TimberStrand®

There are 12 toxic substances that require development of a Toxic Substance Reduction Plan based on the criteria set out in the Toxics Reduction Act, 2009 and O.Reg. 455/09.

The substances are:

Nitrogen Dioxide*
- As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

Phosphorus*
- A component of raw wood and carried through to the end product

Cadmium*
- A component of raw wood and carried through to the end product

Zinc*
- A component of raw wood and carried through to the end product
- As a component of an additive for a specific product produced

MDI*
- As an additive used as an adhesive to bind wood strands into a product

pMDI*
- As an additive used as an adhesive to bind wood strands into a product

Formaldehyde*
- As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

Methanol*
- As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

Carbon Monoxide*
- As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

Total Particulate Matter (TPM)*
- As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

Particulate Matter Less than 10 microns (PM_{10})*
- As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

Particulate Matter Less than 2.5 microns (PM_{2.5})
- As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity
Note*: Separate plans have been developed for each of the other toxic substances.

**Reduction Options to be Implemented**

None. The facility does not intend to implement any of the identified options beyond those currently in place.

**Facility Information:**
- **Facility Name:** Kenora TimberStrand®
- **NPRI Identification Number:** 7658
- **O. Reg. 127 Number:** 9016
- **Two Digit NAICS Code:** 32
- **Four Digit NAICS Code:** 3212
- **Six Digit NAICS Code:** 321215
- **Number of Full-time Employees:** 151
- **UTM Spatial Coordinates:** Northing: 5515015N
  Easting: 401989E
  Zone: 15N

**Owner of the Facility Information:**
- **Name:** Weyerhaeuser Company Limited
- **Address:** 925 West Georgia St. Suite 500 Cathedral Place,
  Vancouver, British Columbia
- **Postal Code:** V6C 3L2
- **Phone Number:** (604) 661-8037
- **Fax Number:** (604) 687-2314

**Highest Ranking Employee at the Facility Information**
- **Name:** Bill Candline
- **Title:** Unit General Manager
- **Address:** 1000 Jones Road PO Box 1930 Kenora, Ontario
- **Postal Code:** P9N 3X8
- **Phone Number:** (807) 548-7153
- **Fax Number:** (807) 548-7134
- **Email:** bill.candline@weyerhaeuser.com

**Parent Company Information**
- **Legal Name of Parent Company:** Weyerhaeuser NR Company
- **Address of Parent Company:** PO Box 9777 Federal Way, Washington
  USA 98063-9777
- **Percentage of Facility Owned by Company:** 100%
- **CCRA Business Number:** 103440624

**Toxic Substances for Which Facility Must Prepare Plan:**
Substance 1 (covered in a different plan): Carbon Dioxide
CAS Number: 630-08-0

Substance 2 (covered in a different plan): Total Particulate Matter (TPM)
CAS Number: NA

Substance 3 (covered in a different plan): Phosphorus
CAS Number: NA

Substance 4 (covered in a different plan): Cadmium
CAS Number: NA-03

Substance 5 (covered in a different plan): Zinc
CAS Number: NA-14

Substance 6 (covered in a different plan): Formaldehyde
CAS Number: 50-00-0

Substance 7 (covered in a different plan): Methanol
CAS Number: 67-56-1

Substance 8 (covered in a different plan): MDI
CAS Number: 101-68-8

Substance 9 (covered in a different plan): Nitrogen Dioxide
CAS Number: 11104-93-1

Substance 10 (covered in a different plan): pMDI
CAS Number: 9016-87-9

Substance 11 (covered in a different plan): Particulate Matter < 10 Microns (PM_{10})
CAS Number: NA

Substance 12 (covered in this plan): Particulate Matter < 2.5 Microns (PM_{2.5})
CAS Number: NA

Plan Contacts:
Person Coordinating the Preparation of the plan:
Name: R. Cecil Burns
Position: Environmental Coordinator
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
Postal Code: P9N 3X8
Phone Number: (807) 548-7210
Fax Number: (807) 548-7200
Email: cecil.burns@weyerhaeuser.com

Person Who Prepared the Plan:
Name: R. Cecil Burns
Position: Environmental Coordinator
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
Postal Code: P9N 3X8
Phone Number: (807) 548-7210
Fax Number: (807) 548-7200
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Public Contact:
Name: Wayne Roznowsky
Position: Manager Public Affairs
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Email: wayne.roznowsky@weyerhaeuser.com

Technical Contact:
Name: R. Cecil Burns
Position: Environmental Coordinator
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Postal Code: P9N 3X8
Phone Number: (807) 548-7210
Fax Number: (807) 548-7200
Email: cecil.burns@weyerhaeuser.com

Planner Who Provided Recommendations:
Name: R. Cecil Burns
Planner Licence #: TSRP0067

Plan Summary Statement

This plan summary accurately reflects the content of the Toxic Substance Reduction Plan for PM$_{2.5}$, prepared by Weyerhaeuser Kenora TimberStrand, dated December, 2013.
Certification by Highest Ranking Employee

As of December 18, 2013, I, Bill Candline, certify that I have read the Toxic Substance Reduction Plan for the Toxic Substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

PM_{2.5}

_____________________________________
Bill Candline
Unit General Manager
Weyerhaeuser Kenora TimberStrand

Certification by Licensed Planner

As of December 18, 2013, I, R. Cecil Burns, certify that I am familiar with the processes at the Weyerhaeuser Kenora TimberStrand facility that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraph 7 iii, iv and v of subsection 4(1) of the Toxics Reduction Act, 2009 that are set out in the plan dated December, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

PM_{2.5}

_____________________________________
R. Cecil Burns, CET, EP, CMVP, LTSRP.
(Planner Licence # TSRP0067)
Weyerhaeuser Kenora TimberStrand
WEYERHAEUSER COMPANY LIMITED
KENORA TIMBERSTRAND®
2012 TOXIC SUBSTANCE REDUCTION PLAN SUMMARY FOR
Polymeric Diphenylmethane Diisocyanate (pMDI)
Prepared in Accordance with
The Toxics Reduction Act, 2009 and
O.Reg. 455/09 General
December, 2013
**Statement of Intent and Objectives of the Plan**

**Statement of Intent:** The facility uses pMDI in the manufacture of TimberStrand®. This plan will address the use of pMDI. pMDI is used as an adhesive to bond wood fibres to form the product known as TimberStrand. The plan intends to minimize the use of pMDI.

**Objective:** The objective of the plan is to minimize the use of pMDI.

**Target:** The facility has not set targets to reduce the use of pMDI.

**Description of Toxic Substances Found at Kenora TimberStrand®**

There are 12 toxic substances that require development of a Toxic Substance Reduction Plan based on the criteria set out in the Toxics Reduction Act, 2009 and O.Reg. 455/09.

The substances are:

Carbon Monoxide*
- As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

Phosphorus*
- A component of raw wood and carried through to the end product

Cadmium*
- A component of raw wood and carried through to the end product

Zinc*
- A component of raw wood and carried through to the end product
- As a component of an additive for a specific product produced

MDI*
- As an additive used as an adhesive to bind wood strands into a product

pMDI
- As an additive used as an adhesive to bind wood strands into a product

Formaldehyde*
- As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

Methanol*
- As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

Nitrogen Dioxide*
- As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

Total Particulate Matter (TPM)*
• As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

Particulate Matter Less than 10 microns (PM$_{10}$)*
• As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

Particulate Matter Less than 2.5 microns (PM$_{2.5}$)*
• As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

Note*: Separate plans have been developed for each of the other toxic substances.

Options to be Implemented

None. Technical and economic analysis of options concluded that no technically and economically feasible options beyond what the facility currently uses exist for reducing the use or release of pMDI.

Facility Information:
Facility Name: Kenora TimberStrand®
NPRI Identification Number: 7658
O. Reg. 127 Number: 9016
Two Digit NAICS Code: 32
Four Digit NAICS Code: 3212
Six Digit NAICS Code: 321215
Number of Full-time Employees: 151
UTM Spatial Coordinates: Northing: 5515015N
Easting: 401989E
Zone: 15N

Owner of the Facility Information:
Name: Weyerhaeuser Company Limited
Address: 925 West Georgia St. Suite 500 Cathedral Place,
Vancouver, British Columbia
Postal Code: V6C 3L2
Phone Number: (604) 661-8037
Fax Number: (604) 687-2314

Highest Ranking Employee at the Facility Information
Name: Bill Candline
Title: Unit General Manager
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
Postal Code: P9N 3X8
Phone Number: (807) 548-7153
Fax Number: (807) 548-7134
Email: bill.candline@weyerhaeuser.com

Parent Company Information
Legal Name of Parent Company: Weyerhaeuser NR Company  
Address of Parent Company: PO Box 9777 Federal Way, Washington USA 98063-9777  
Percentage of Facility Owned by Company: 100%  
CCRA Business Number: 103440624

**Toxic Substances for Which Facility Must Prepare Plan:**

<table>
<thead>
<tr>
<th>Substance 1 (covered in a different plan): Carbon Monoxide</th>
<th>CAS Number: 630-08-0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance 2 (covered in a different plan): Total Particulate Matter (TPM)</td>
<td>CAS Number: NA</td>
</tr>
<tr>
<td>Substance 3 (covered in a different plan): Phosphorus</td>
<td>CAS Number: NA</td>
</tr>
<tr>
<td>Substance 4 (covered in a different plan): Cadmium</td>
<td>CAS Number: NA-03</td>
</tr>
<tr>
<td>Substance 5 (covered in a different plan): Zinc</td>
<td>CAS Number: NA-14</td>
</tr>
<tr>
<td>Substance 6 (covered in a different plan): Formaldehyde</td>
<td>CAS Number: 50-00-0</td>
</tr>
<tr>
<td>Substance 7 (covered in a different plan): Methanol</td>
<td>CAS Number: 67-56-1</td>
</tr>
<tr>
<td>Substance 8 (covered in a different plan): MDI</td>
<td>CAS Number: 101-68-8</td>
</tr>
<tr>
<td>Substance 9 (covered in a different plan): Nitrogen Dioxide</td>
<td>CAS Number: 11104-93-1</td>
</tr>
<tr>
<td>Substance 10 (covered by this plan): pMDI</td>
<td>CAS Number: 9016-87-9</td>
</tr>
<tr>
<td>Substance 11 (covered in a different plan): Particulate Matter &lt; 10 Microns (PM$_{10}$)</td>
<td>CAS Number: NA</td>
</tr>
<tr>
<td>Substance 12 (covered in a different plan): Particulate Matter &lt; 2.5 Microns (PM$_{2.5}$)</td>
<td>CAS Number: NA</td>
</tr>
</tbody>
</table>

**Plan Contacts:**

**Person Coordinating the Preparation of the plan:**

Name: R. Cecil Burns  
Position: Environmental Coordinator  
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario  
Postal Code: P9N 3X8
Toxic Substance Reduction Plan Summary - pMDI

Phone Number: (807) 548-7210
Fax Number: (807) 548-7200
Email: cecil.burns@weyerhaeuser.com

**Person Who Prepared the Plan:**
Name: R. Cecil Burns
Position: Environmental Coordinator
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
Postal Code: P9N 3X8
Phone Number: (807) 548-7210
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**Public Contact:**
Name: Wayne Roznowsky
Position: Manager Public Affairs
Address: Postal Bag 1020, Grande Prairie, Alberta
Postal Code: T8V 3A9
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Fax Number: (780) 5390-8004
Email: wayne.roznowsky@weyerhaeuser.com

**Technical Contact:**
Name: R. Cecil Burns
Position: Environmental Coordinator
Address: 1000 Jones Road PO Box 1930 Kenora, Ontario
Postal Code: P9N 3X8
Phone Number: (807) 548-7210
Fax Number: (807) 548-7200
Email: cecil.burns@weyerhaeuser.com

**Planner Who Provided Recommendations:**
Name: R. Cecil Burns
Planner Licence #: TSRP0067

**Plan Summary Statement**

This plan summary accurately reflects the content of the Toxic Substance Reduction Plan for pMDI, prepared by Weyerhaeuser Kenora TimberStrand, dated December, 2013.
Certification by Highest Ranking Employee

As of December 18, 2013, I, Bill Candline, certify that I have read the Toxic Substance Reduction Plan for the Toxic Substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

pMDI

________________________________________
Bill Candline
Unit General Manager
Weyerhaeuser Kenora TimberStrand

Certification by Licensed Planner

As of December 18, 2013, I, R. Cecil Burns, certify that I am familiar with the processes at the Weyerhaeuser Kenora TimberStrand facility that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraph 7 iii, iv and v of subsection 4(1) of the Toxics Reduction Act, 2009 that are set out in the plan dated December, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

pMDI

_______________________________
R. Cecil Burns, CET, EP, CMVP, LTSRP.
(Planner Licence # TSRP0067)
Weyerhaeuser Kenora TimberStrand
WEYERHAEUSER COMPANY LIMITED
KENORA TIMBERSTRAND®
2012 TOXIC SUBSTANCE REDUCTION PLAN SUMMARY FOR Total Particulate Matter (TPM)

Prepared in Accordance with
The Toxics Reduction Act, 2009 and
O.Reg. 455/09 General
December, 2013
Statement of Intent and Objectives of the Plan

Statement of Intent: The facility creates and uses Total Particulate Matter in the manufacture of TimberStrand®. This plan will address the creation and use of Total Particulate Matter. Total Particulate Matter is created as a by-product of wood processing and generated by truck traffic on site roads. Total Particulate Matter is used as a biomass fuel. The plan does not intend to reduce the creation or use of Total Particulate Matter.

Objective: The objective of the plan is to minimize the release of Total Particulate Matter offsite.

Target: The facility has set no targets to reduce the creation or use of Total Particulate Matter.

Description of Toxic Substances Found at Kenora TimberStrand®

There are 12 toxic substances that require development of a Toxic Substance Reduction Plan based on the criteria set out in the Toxics Reduction Act, 2009 and O.Reg. 455/09.

The substances are:

Nitrogen Dioxide
- As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

Phosphorus*
- A component of raw wood and carried through to the end product

Cadmium*
- A component of raw wood and carried through to the end product

Zinc*
- A component of raw wood and carried through to the end product
- As a component of an additive for a specific product produced

MDI*
- As an additive used as an adhesive to bind wood strands into a product

pMDI*
- As an additive used as an adhesive to bind wood strands into a product

Formaldehyde*
- As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

Methanol*
- As a by-product of drying strands, heating mats to cure resin and burning of wood biomass

Carbon Monoxide*
- As a by-product of drying strands, heating mats to cure resin and burning of wood biomass
Total Particulate Matter (TPM)
- As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

Particulate Matter Less than 10 microns (PM$_{10}$)*
- As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

Particulate Matter Less than 2.5 microns (PM$_{2.5}$)*
- As a by-product of drying strands, burning of wood biomass, the processing of TimberStrand in the manufacturing process and generation of road dust from site activity

Note*: Separate plans have been developed for each of the other toxic substances.

**Reduction Options to be Implemented**

None. The facility does not intend to implement any of the identified options beyond those currently in place.

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**Facility Information:**

- **Facility Name:** Kenora TimberStrand®
- **NPRI Identification Number:** 7658
- **O. Reg. 127 Number:** 9016
- **Two Digit NAICS Code:** 32
- **Four Digit NAICS Code:** 3212
- **Six Digit NAICS Code:** 321215
- **Number of Full-time Employees:** 151
- **UTM Spatial Coordinates:** Northing: 5515015N
  Easting: 401989E
  Zone: 15N

**Owner of the Facility Information:**

- **Name:** Weyerhaeuser Company Limited
- **Address:** 925 West Georgia St. Suite 500 Cathedral Place, Vancouver, British Columbia
- **Postal Code:** V6C 3L2
- **Phone Number:** (604) 661-8037
- **Fax Number:** (604) 687-2314

**Highest Ranking Employee at the Facility Information**

- **Name:** Bill Candline
- **Title:** Unit General Manager
- **Address:** 1000 Jones Road PO Box 1930 Kenora, Ontario
- **Postal Code:** P9N 3X8
- **Phone Number:** (807) 548-7153
- **Fax Number:** (807) 548-7134
- **Email:** bill.candline@weyerhaeuser.com
Parent Company Information
Legal Name of Parent Company: Weyerhaeuser NR Company
Address of Parent Company: PO Box 9777 Federal Way, Washington USA 98063-9777
Percentage of Facility Owned by Company: 100%
CCRA Business Number: 103440624

Toxic Substances for Which Facility Must Prepare Plan:

Substance 1 (covered in a different plan): Carbon Monoxide
CAS Number: 630-08-0

Substance 2 (covered by this plan): Total Particulate Matter (TPM)
CAS Number: NA

Substance 3 (covered in a different plan): Phosphorus
CAS Number: NA

Substance 4 (covered in a different plan): Cadmium
CAS Number: NA-03

Substance 5 (covered in a different plan): Zinc
CAS Number: NA-14

Substance 6 (covered in a different plan): Formaldehyde
CAS Number: 50-00-0

Substance 7 (covered in a different plan): Methanol
CAS Number: 67-56-1

Substance 8 (covered in a different plan): MDI
CAS Number: 101-68-8

Substance 9 (covered in a different plan): Nitrogen Dioxide
CAS Number: 11049-93-1

Substance 10 (covered in a different plan): pMDI
CAS Number: 9016-87-9

Substance 11 (covered in a different plan): Particulate Matter < 10 Microns (PM10)
CAS Number: NA

Substance 12 (covered in a different plan): Particulate Matter < 2.5 Microns (PM2.5)
CAS Number: NA

Plan Contacts:
Person Coordinating the Preparation of the plan:
Name: R. Cecil Burns
Position: Environmental Coordinator
Toxic Substance Reduction Plan Summary – Total Particulate Matter

Plan Summary Statement

This plan summary accurately reflects the content of the Toxic Substance Reduction Plan for Nitrogen Dioxide, prepared by Weyerhaeuser Kenora TimberStrand, dated December, 2013.
Certification by Highest Ranking Employee

As of December 18, 2013, I, Bill Candline, certify that I have read the Toxic Substance Reduction Plan for the Toxic Substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

Total Particulate Matter

________________________________________
Bill Candline
Unit General Manager
Weyerhaeuser Kenora TimberStrand

Certification by Licensed Planner

As of December 18, 2013, I, R. Cecil Burns, certify that I am familiar with the processes at the Weyerhaeuser Kenora TimberStrand facility that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraph 7 iii, iv and v of subsection 4(1) of the Toxics Reduction Act, 2009 that are set out in the plan dated December, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Total Particulate Matter

____________________________________
R. Cecil Burns, CET, EP, CMVP, LTSRP.
(Planner Licence # TSRP0067)
Weyerhaeuser Kenora TimberStrand