Toxic Reduction Plan

BASIC FACILITY INFORMATION

Substance Name & CAS #	Volatile Organic Compounds (Total)	NA - M16
	Total Particulate Matter	NA - M08
	PM10	NA - M09
	PM2.5	NA - M10
	Oxides of Nitrogen (as NO2)	11104-93-11
Facility Identification and Site Address		
Company Name	Resolute FP Canada Inc.	
Facility Name	Thunder Bay Sawmill	
Facility Address	156 Darrel Avenue, Thunder Bay	
Coordinates (UTM/NAD 83)	UTM ZONE 16 NORTH, Easting-334424, Northing- 5358452	
Number of Employees	180	
NPRI ID	11090	
Ontario MOE ID	10492	
PARENT COMPANY INFORMATION		
Name & Address	Resolute FP Canada Inc., 111 Duke St., suite 5000 Montreal, QuebecH3C 2M1	
Percent Ownership	100%	
Business Number	144272010	
PRIMARY NAICS CODES		
2 Digit NAICS Code	32	
4 Digit NAICS Code	3211	
6 Digit NAICS Code	321111	
COMPANY CONTACT INFORMATION		
Facility Public Contact	*Patrick Roy/ Yard & Environment Supervisor/ 807-624-2444*	
Facility Technical Contact	*Duane Wallace/Engineer 807-624-2411*	
Person Who Prepared Plan	*Aimee Matheson Rainy Lake Technical Solutions 807-276-4753*	
Parent Company Contact	*Pacale Lagace Director Environment and Climate Change 514-394-3675*	
Planner Responsible for Making Recommendations	*Name/Company/Address/Tel* *Pascale Lagacé/ Director Environment and Climate Change/514-394-3675*	*Planner Licence #* *TSRP0073*
Planner Responsible for Certification	*Name/Company/Address/Tel #* *PascaleLagacé/ Director Environment and Climate Change/514-394-3675*	*Planner Licence #* *TSRP0073*

TOTAL VOC PLAN OVERVIEW

Statement of Intent and Objective

VOC'S are contained naturally in the wood. This substance is released during the drying process of lumber. Resolute Forest Products Thunder Bay Sawmill does not intend to reduce the creation of VOC's at this time due to no feasible options identified. We are committed to explore new technology to reduce the creation of this substance as it becomes available.

Description of Process That Creates Toxic Substance

Green lumber is loaded on kiln carts and placed inside the kilns. Wood shavings are combusted in two heater units to heat thermal oil and circulate through heat coils to dry lumber (180-205 F). As lumber dries, the VOC's are released from the wood into the atmosphere. Some vapors leak through the structure cracks but mostly they are released when the kilns reach operating temperatures and roof vents open. Also, a small amount of VOC's are manufactured in the wood fired burner and released to the air. Fore more information refer to the toxic substance accounting document.

Toxic Substance Accounting Information

Toxic Substance Accounting information, including records of methods used to track and quantify VOC's released can be found in the toxic substance accounting document.

Costing Data

There are no costs associated with the use, release, disposal, transfer and contained in product for VOC's because the substance is naturally present in the wood, and that we incur no costs associated with the release or with its presence in our product. Moreover, we do not use or dispose of this substance.

Toxic Substance Use and Creation Reduction Options

Located on last page of this document

TPM, PM 10, PM 2.5, N02 PLAN OVERVIEW

Statement of Intent and Objective

TPM, PM10, PM2.5 and N02 are coincidentally manufactured as a by-product in the sawmill manufacturing operations. Resolute Forest Products Thunder Bay Sawmill does not intend to reduce the creation of these substances at this time due to no feasible options identified. We are committed to explore new technology to reduce the creation of this substance as it becomes available.

Description of Process That Creates Toxic Substance

Logs are cut into dimensional lumber through sawlines. Fine dust produced during the sawing process and the planning process is captured by dust cyclones and released to the air. Also, a small amount of TPM, PM10, PM2.5 and N02 are manufactured in the wood fired burner and released to the air. Fore more information refer to the toxic substance accounting document.

Toxic Substance Accounting Information

Toxic Substance Accounting information, including records of methods used to track and quantify TPM, PM10, PM2.5 and N02 released can be found in the toxic substance accounting document.

Costing Data

There are no costs associated with the use, release, disposal, transfer and contained in product for TPM, PM10, PM2.5 and N02 because the substance is produced in the manufacturing process , therefore we incur no costs associated with the release or with its presence in our product. Moreover, we do not use or dispose of this substance.

Toxic Substance Use and Creation Reduction Options

Reduction Category	Description and Rational of Reduction	Option
Materials and Feedstock Substitution	**All wood species contain methanol, no material substitution feasible**	**No Options Identified**
Product Design or Reformulation	**Wood drying is the main source of methanol emissions. The customers require dry wood for their use.**	**No Options Identified**
Equipment or Process Modifications	**Heat treatment regulations from Canadian Food Inspection Agency require a minimal drying temperature of 140 degree F. Therefore process modification to temperature is not an option.**	**No Options Identified**
Spill and Leak Prevention	**Methanol is contained in the wood so there are no spills of methanol on site.**	**No Options Identified**
Onsite Re-use or Recycling	**Methanol is released during drying process of lumber and there are no methods identified to capture the substance.**	**No Options Identified**
Improved Inventory Management or Purchasing Techniques	**Methanol is contained in the wood and we do not purchase or store this substance on site.**	**No Options Identified**
Training and Improved Operating Practices	**The following procedures are in place to minimize VOC emissions including methanol;** **1-the use of air flow baffling;** **2-the use of stickering;** **3-optimization of in kiln wood moisture;** **4-the use and optimization of kiln operating control systems;** **5-the use and optimization of humidity tracking;** **6-the maintenance of air circulation and heat source components.**	**No other Options Identified**

PLAN CERTIFICATION

PLANNER RECOMMENDATIONS AND RATIONALE

PLANNER RECOMMENDATIONS AND RATIONALE APPENDED AS SEPARATE DOCUMENT

CERTIFICATION BY HIGHEST EMPLOYEE

As of Dec 30, 2013, I Cam Hannah, certify that I have read the toxic reduction plan for the toxic substances referred to below and I 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 the Act.

Toxic Substances: Total Particulate Matter, PM10, PM 2.5, NO2

December 30, 2013

Signature Date

Name: Cam Hannah
Title: Production Manager
Company: Resolute Forest Products

CERTIFICATION BY LICENCED PLANNER

As of December 19, 2013, I, Pascale Lagacé certify that I am familiar with the processes at Resolute FP Canada Inc. Thunder Bay Sawmill that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (1) of the Toxics Reduction Act, 2009 that are set out in plan dated December, 2013 and that the plan complies with the Act and Ontario Regulation 455/09 (General) made under the Act.

Toxic Substance:

Total Particulate Matter
PM10
PM2.5
NO2

December 19, 2013

Signature *Date*

NAME: Pascale Lagacé
TITLE: Environmental Director
COMPANY: Resolute Forest Products
LICENCE # TSRP0073