Toxic Substance Accounting Report For 2019

1. FACILITY INFORMATION

Company Name:	Roseburg Forest Products Canada Ltd.
Website:	https://www.roseburg.com/Library/
Date of Report:	01/06/2020
NACIS Code:	321216
NPRI ID:	5609
O. Reg 127 ID:	5090
Site Address:	777 Fibreboard Drive, Pembroke, ON, K8A6W4 Canada
Public Contact:	Nick Mariani, Environmental Manager, 613-732-3939 ext. 76267
Highest Ranking Employee:	Alexandre Ouellette, Plant Manager, 613-732-3939 ext. 76220

2. SUBSTACE INFORMATION

Substance Name	CAS Number	Used (tonnes)	Created (tonnes)	Released to Air (tonnes)	Amount Disposed (tonnes)	Amount Recycled (tonnes)	Amount Contained In Product (tonnes)
Ammonia	NA – 16	0	>10 to 100	>10 to 100	0	0	0
Carbon Monoxide	630-08-0	0	>100 to 1000	>100 to 1000	0	0	0
Formaldehyde	50-00-0	>10 to 100	>100 to 1000	>100 to 1000	0	0	0
Formic Acid	64-18-6	0	>10 to 100	>10 to 100	0	0	0
Methanol	67-56-1	>10 to 100	>100 to 1000	>100 to 1000	0	0	0
Nitrogen Oxides	11104-93-1	0	>100 to 1000	>100 to 1000	0	0	0
PM 10	NA – M09	0	>0 to 1	>0 to 1	0	0	0
PMDI	9016-87-9	>10 to 100	0	>0 to 1	0	0	0
Total Particulate	NA – M08	0	>10 to 100	>10 to 100	0	0	0
Total VOCs	NA – M16	>10 to 100	>100 to 1000	>100 to 1000	0	0	0

3. COMPARISON TO PREVIOUS YEAR

Substance Name	CAS Number	Used/Created /Released	% Change from 2017	Rationale For Change
Ammonia	NA – 16	Used	0%	No Change
		Created	4%	Increased heater uptime in 2019
		Released to Air	4%	Increased heater uptime in 2019
Carbon Monoxide	630-08-0	Used	0%	No Change
		Created	217%	Updated Emissions Data - Variation in Heater Operations
		Released to Air	217%	Updated Emissions Data - Variation in Heater Operations
Formaldehyde	50-00-0	Used	-13%	Lower production and usage that is more efficient.
		Created	105%	Updated Emissions Data
		Released to Air	105%	Updated Emissions Data
Formic Acid	64-18-6	Used	0%	No Change
		Created	4%	Increased heater uptime in 2019
		Released to Air	4%	Increased heater uptime in 2019
Methanol	67-56-1	Used	-13%	Lower production and usage that is more efficient.
		Created	-14%	Updated Emissions Data
		Released to Air	-14%	Updated Emissions Data
Nitrogen Oxides	11104-93-1	Used	0%	No Change
		Created	4%	Increased heater uptime in 2019
		Released to Air	4%	Increased heater uptime in 2019
PM 10	NA – M09	Used	0%	No Change
		Created	0%	No Change
		Released to Air	0%	No Change
PMDI	9016-87-9	Used	1952%	An increase in MDI Production Levels.
		Created	0%	No Change
		Released to Air	1049%	An increase in MDI Production Levels.
Total Particulate	NA – M08	Used	0%	No Change
		Created	37%	Updated Emissions Data.
		Released to Air	37%	Updated Emissions Data.
Total VOCs	NA – M16	Used	-13%	Lower production and more efficient resin usage.
		Created	28%	Updated Emissions Data and Increase in operation time from 2018.
		Released to Air	28%	Updated Emissions Data and Increase in operation time from 2018.

4. SIGNIFICANT CHANGES FROM 2018-2019

Roseburg Forest Products Canada Ltd. (Pembroke Mill) completed source testing in 2019, which demonstrated a change in emission factors (rate of emission) of some of the listed substances. Source testing is expected to be repeated again in 2020, with the implementation of a newer, more efficient heat energy system. In addition to updated emission factors, the facility saw an increase in use of formaldehyde free resin (Called MDI), which increased PMDI usage and releases, while also decreasing formaldehyde and methanol values. As emission factors are updated year-year, changes to emission factors and overall emissions are expected due to the normal variation in the MDF manufacturing process.

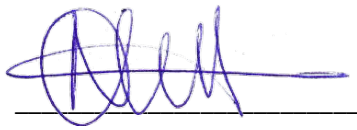
5. TSRP ACTIVITY OBJECTIVES AND RESULTS

Activity	Steps that were taken in the reporting period to implement this option	Difference between steps taken and those in the plan and indication of whether timetable for steps will be met	Expected Results	Estimate of substance reductions achieved
Change mix of hardwood/softwood/popl ar in production recipe.	Poplar chips are no longer separated from the rest of the hardwood stock. Instead, variation in hardwood feedstock is controlled by mixing hardwood chips with recycle wood fibre from the process to help ensure more uniform properties.	- Poplar is no longer being separated. - Variation in feedstock is being controlled through better mixing of materials.	- Better uniformity of feedstock properties (like pH) that can impact board quality and resin effectiveness. This is expected to reduce waste generated caused by poor board quality as a result of high variation of feed stock.	- Unknown the exact benefit. Reduced variation is associated with better uptime and reduced waste.
Increased material recirculation within the process – Change use of recycled fibre from hogfuel to board use	- The facility continues to recycle rejected wood fibre back to the start of the process.	- No change, fibre is recycled into the process as normal operation.	- Reduced resin and wood usage since recycled fibre is already processed. - Reduced waste fibre disposal.	- The exact benefit is unknown. - Resin and wood usage efficiency is improved
Install and operate dust burner	- Dust burner operated throughout 2019.	- On track with plan, dust burner in operation and dust diverted away from offsite disposal.	- Improved combustion efficiency, reduced fugitive emissions from handling loose sander dust. - Reduce the need to purchase additional wood fuel by using process residuals.	- ~43% increase in dust consumed through the dust burner. Roughly 10k tonne of additional wood dust diverted from landfill.
Send ash to farms instead of landfill	- Ash approved for application on farm fields. - Wood ash material delivered to farms.	- Steps on track as detailed in plan.	- No substantial change in the Use and Creation of substances. But waste product is now being diverted for beneficial use.	- Over 390 tonnes of wood ash diverted to farms in 2019.
Pelletizing of sander dust	- Pelletizer not operated in 2019.	- The stoppage of the pelletizer was not part of the reduction plan. - The activation of the dust burner made the operation of the pelletizer no longer needed.	- Reduced fugitive PM emissions from handling loose sander dust - Improved heater efficiency when utilizing “dry fuel”	- Reduce PM emissions from handling rejected wood dust. This is now achieved using the dust burner.

Control humidity level from vendors	- Continued from 2018, to perform moisture analysis on raw materials. - Material is billed by the dry tonne; ensuring suppliers buy in to maintain lower moisture. - Quality checks on wood fuel (bark) also performed.	- Timeline set in plan still on track.	- Reduced energy consumption in combustor and in preparing chips and sawdust for refining.	- Improved heat plant operation, and less downtime in the process. This will reduce start up and shutdown situations that can cause excess emissions.

6. CERTIFICATION

As of 22/06/2019, I, Alexandre Ouellette, certify that I have read the reports on the toxic substance reduction plans for the toxic substances referred to above and am familiar with their contents, and to my knowledge the information contained in the reports is factually accurate and the reports comply with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.



Alexandre Ouellette

Plant Manager

Roseburg Forest Products Canada Ltd.