# Solution

# **2017 Toxic Substances Accounting Report**

Espanola Mill Prepared under the Toxics Reduction Act & O. Reg. 455/09

# Environmental Policy

We will conduct business in a manner that conserves resources and miinimizesour environmental footprint. We seek continual improvement in our environmental performance by setting, reviewing and updating environmental goals.

Our employees share in this responsibility and are accountable for the successful implementation of this policy. Local management is empowered to curtail operations, as necessary, to prevent serious environmental impacts.

We are committed to:

- Managing operations to comply with all applicable laws and regulations and other requirements to which we subscribe, with emphasis on pollution prevention, and minimizing adverse environmental impacts;
- Identifying and evaluating potential environmental risks and implementing appropriate measures to eliminate or control those risks;
- Developing and implementing measures to ensure sustainable use of materials, resources and energy;
- Promoting and developing awareness, leadership and accountability with respect to environmental protection among all our employees and persons working for us or on our behalf;
- Communicating with our employees, customers, suppliers, the communities in which we operate and public officials to build greater mutual understanding of environmental issues;
- Participating in the development of governmental environment policies based on sound science and sustainability principles;
- Supporting research aimed at improving process efficiency and environmental protection measures and applying such knowledge to our product stewardship;
- Conducting independent environmental audits to confirm that our management practices meet policy objectives, legislation and the principles of sound management;
- Reporting to the Board of Directors on the environmental risks, opportunities, and status of our operations.

July 2016



### 2017 TOXIC SUBSTANCES ACCOUNTING REPORT

Under Section 9 of the Toxics Reduction Act, an owner and operator of a facility are required to ensure for each process at the facility that uses or creates a prescribed toxic substance, that the substance is tracked and quantified, in accordance with the regulations. Under Section 10 (4) of the Act, the owner and the operator of a facility who are required under this section to ensure that a report is prepared shall ensure that all or part of the report, or some or all of the information contained in the report, is made available to the public on the Internet and by other means in accordance with the regulations.

The information contained within this report is the result of the accounting activities outlined in both the Act and Regulation. This report satisfies the requirements for reporting to the public as outlined in both the Act and Regulation.

Substance:	Cadmium (and its compounds)		
CAS Number:		**	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	kg	kg	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	10-100	4.806	13.8%
The amount of substance that was created:	0-1	0.000	0.0%
The amount of substance that was contained in product:	10-100	-0.930	-2.7%
Released to air	*	-0.720	-16.3%
Released to water	*	-1.086	-8.3%
Released to land	*	0.000	0.0%
On site disposal	*	22.175	30.8%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

# Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period? A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its use of this metal (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Based on the information gathered in this report, the amount of this metal (and its compounds) used is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

Substance:	2,3,7	7,8-Tetrachlorodiben:	zo-p-dioxin
CAS Number:		1746-01-6	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	g	g	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.0000	0.0%
The amount of substance that was created:	0-1	0.1069	35.9%
The amount of substance that was contained in product:	0-1	0.0000	0.0%
Released to air	*	0.0000	0.0%
Released to water	*	0.0000	0.0%
Released to land	*	0.0000	0.0%
On site disposal	*	0.1069	35.9%
Off site disposal	*	0.0000	0.0%
Off site recycling	*	0.0000	0.0%

Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

Toxic Substance Reduction Plan Objective

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

**Implemented Options** 

Substance:	1,2,3,7,8-Pentachlorodibenzo-p-dioxin			
CAS Number:		40321-76-4		
	2017	Change from 2016	Change from 2016	
On a facility-wide basis:	g	g	%	
Amount that entered the facility as the substance itself or as				
a constituent of another substance:	0-1	0.0000	0.0%	
The amount of substance that was created:	0-1	0.0234	35.9%	
The amount of substance that was contained in product:	0-1	0.0000	0.0%	
Released to air	*	0.0000	0.0%	
Released to water	*	0.0000	0.0%	
Released to land	*	0.0000	0.0%	
On site disposal	*	0.0234	35.9%	
Off site disposal	*	0.0000	0.0%	
Off site recycling	*	0.0000	0.0%	

# Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin		
CAS Number:		39227-28-6	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	g	g	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.0000	0.0%
The amount of substance that was created:	0-1	0.0378	35.9%
The amount of substance that was contained in product:	0-1	0.0000	0.0%
Released to air	*	0.0000	0.0%
Released to water	*	0.0000	0.0%
Released to land	*	0.0000	0.0%
On site disposal	*	0.0378	35.9%
Off site disposal	*	0.0000	0.0%
Off site recycling	*	0.0000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

Substance:	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin			
CAS Number:	19408-74-3			
	2017	Change from 2016	Change from 2016	
On a facility-wide basis:	g	g	%	
Amount that entered the facility as the substance itself or as				
a constituent of another substance:	0-1	0.0000	0.0%	
The amount of substance that was created:	0-1	-0.0004	-5.4%	
The amount of substance that was contained in product:	0-1	0.0000	0.0%	
Released to air	*	-0.0004	-5.4%	
Released to water	*	0.0000	0.0%	
Released to land	*	0.0000	0.0%	
On site disposal	*	0.0000	0.0%	
Off site disposal	*	0.0000	0.0%	
Off site recycling	*	0.0000	0.0%	

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin		
CAS Number:		57653-85-7	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	g	g	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.0000	0.0%
The amount of substance that was created:	0-1	-0.0001	-5.1%
The amount of substance that was contained in product:	0-1	0.0000	0.0%
Released to air	*	-0.0001	-5.1%
Released to water	*	0.0000	0.0%
Released to land	*	0.0000	0.0%
On site disposal	*	0.0000	0.0%
Off site disposal	*	0.0000	0.0%
Off site recycling	*	0.0000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period? A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

Substance:	1,2,3,4,	6,7,8-Heptachlorodib	enzo-p-dioxin
CAS Number:		35822-46-9	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	g	g	%
Amount that entered the facility as the substance itself or as		-	
a constituent of another substance:	0-1	0.0000	0.0%
The amount of substance that was created:	0-1	0.1058	53.8%
The amount of substance that was contained in product:	0-1	0.0000	0.0%
Released to air	*	-0.0034	-5.3%
Released to water	*	0.0842	133.9%
Released to land	*	0.0000	0.0%
On site disposal	*	0.0250	35.9%
Off site disposal	*	0.0000	0.0%
Off site recycling	*	0.0000	0.0%

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Octachlorodibenzo-p-dioxin		
CAS Number:		3268-87-9	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	g	g	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.0000	0.0%
The amount of substance that was created:	1-10	2.4589	32.2%
The amount of substance that was contained in product:	0-1	0.0000	0.0%
Released to air	*	-0.0099	-5.3%
Released to water	*	-0.0382	-8.3%
Released to land	*	0.0000	0.0%
On site disposal	*	2.5070	35.9%
Off site disposal	*	0.0000	0.0%
Off site recycling	*	0.0000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

Substance:	2,3,7,8-Tetrachlorodibenzofuran		
CAS Number:		51207-31-9	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	g	g	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.0000	0.0%
The amount of substance that was created:	0-1	0.0192	23.5%
The amount of substance that was contained in product:	0-1	0.0000	0.0%
Released to air	*	-0.0035	-5.3%
Released to water	*	0.0227	139.3%
Released to land	*	0.0000	0.0%
On site disposal	*	0.0000	0.0%
Off site disposal	*	0.0000	0.0%
Off site recycling	*	0.0000	0.0%

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	2,3,4,7,8-Pentachlorodibenzofuran		
CAS Number:	57117-31-4		
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	g	g	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.0000	0.0%
The amount of substance that was created:	0-1	-0.0002	-5.5%
The amount of substance that was contained in product:	0-1	0.0000	0.0%
Released to air	*	-0.0002	-5.5%
Released to water	*	0.0000	0.0%
Released to land	*	0.0000	0.0%
On site disposal	*	0.0000	0.0%
Off site disposal	*	0.0000	0.0%
Off site recycling	*	0.0000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?** A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

Substance:	1,2,3,7,8-Pentachlorodibenzofuran			
CAS Number:	57117-41-6			
	2017	Change from 2016	Change from 2016	
On a facility-wide basis:	g	g	%	
Amount that entered the facility as the substance itself or as				
a constituent of another substance:	0-1	0.0000	0.0%	
The amount of substance that was created:	0-1	-0.0001	-5.1%	
The amount of substance that was contained in product:	0-1	0.0000	0.0%	
Released to air	*	-0.0001	-5.1%	
Released to water	*	0.0000	0.0%	
Released to land	*	0.0000	0.0%	
On site disposal	*	0.0000	0.0%	
Off site disposal	*	0.0000	0.0%	
Off site recycling	*	0.0000	0.0%	

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	1,2,3,4,7,8-Hexachlorodibenzofuran		
CAS Number:	70648-26-9		
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	g	g	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.0000	0.0%
The amount of substance that was created:	0-1	-0.0003	-5.2%
The amount of substance that was contained in product:	0-1	0.0000	0.0%
Released to air	*	-0.0003	-5.2%
Released to water	*	0.0000	0.0%
Released to land	*	0.0000	0.0%
On site disposal	*	0.0000	0.0%
Off site disposal	*	0.0000	0.0%
Off site recycling	*	0.0000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

Substance:	1,2,3	3,7,8,9-Hexachlorodik	penzofuran
CAS Number:		72918-21-9	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	g	g	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.0000	0.0%
The amount of substance that was created:	0-1	0.0000	0.0%
The amount of substance that was contained in product:	0-1	0.0000	0.0%
Released to air	*	0.0000	0.0%
Released to water	*	0.0000	0.0%
Released to land	*	0.0000	0.0%
On site disposal	*	0.0000	0.0%
Off site disposal	*	0.0000	0.0%
Off site recycling	*	0.0000	0.0%

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	1,2,3,6,7,8-Hexachlorodibenzofuran		
CAS Number:		57117-44-9	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	g	g	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.0000	0.0%
The amount of substance that was created:	0-1	-0.0001	-5.1%
The amount of substance that was contained in product:	0-1	0.0000	0.0%
Released to air	*	-0.0001	-5.1%
Released to water	*	0.0000	0.0%
Released to land	*	0.0000	0.0%
On site disposal	*	0.0000	0.0%
Off site disposal	*	0.0000	0.0%
Off site recycling	*	0.0000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period? A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

Substance:	2,3,	2,3,4,6,7,8-Hexachlorodibenzofuran		
CAS Number:		60851-34-5		
	2017	Change from 2016	Change from 2016	
On a facility-wide basis:	g	g	%	
Amount that entered the facility as the substance itself or as				
a constituent of another substance:	0-1	0.0000	0.0%	
The amount of substance that was created:	0-1	-0.0003	-5.2%	
The amount of substance that was contained in product:	0-1	0.0000	0.0%	
Released to air	*	-0.0003	-5.2%	
Released to water	*	0.0000	0.0%	
Released to land	×	<sup>4</sup> 0.0000	0.0%	
On site disposal	k	0.0000	0.0%	
Off site disposal	k	0.0000	0.0%	
Off site recycling	×	<sup>c</sup> 0.0000	0.0%	

Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period? A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	1,2,3,4,6,7,8-Heptachlorodibenzofuran		
CAS Number:	67562-39-4		
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	g	g	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.0000	0.0%
The amount of substance that was created:	0-1	-0.0004	-5.3%
The amount of substance that was contained in product:	0-1	0.0000	0.0%
Released to air	*	-0.0004	-5.3%
Released to water	*	0.0000	0.0%
Released to land	*	0.0000	0.0%
On site disposal	*	0.0000	0.0%
Off site disposal	*	0.0000	0.0%
Off site recycling	*	0.0000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period? A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

## Toxic Substance Reduction Plan Objective

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

Substance:	1,2,3,4,7,8,9-Heptachlorodibenzofuran			
CAS Number:		55673-89-7		
	2017	Change from 2016	Change from 2016	
On a facility-wide basis:	g	g	%	
Amount that entered the facility as the substance itself or as				
a constituent of another substance:	0-1	0.0000	0.0%	
The amount of substance that was created:	1-10	0.3895	35.9%	
The amount of substance that was contained in product:	0-1	0.0000	0.0%	
Released to air	*	0.0000	0.0%	
Released to water	*	0.0000	0.0%	
Released to land	*	0.0000	0.0%	
On site disposal	*	0.3895	35.9%	
Off site disposal	*	0.0000	0.0%	
Off site recycling	*	0.0000	0.0%	

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Octachlorodibenzofuran		
CAS Number:		39001-02-0	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	g	g	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.0000	0.0%
The amount of substance that was created:	0-1	0.0395	26.5%
The amount of substance that was contained in product:	0-1	0.0000	0.0%
Released to air	*	-0.0018	-5.3%
Released to water	*	0.0000	0.0%
Released to land	*	0.0000	0.0%
On site disposal	*	0.0413	35.9%
Off site disposal	*	0.0000	0.0%
Off site recycling	*	0.0000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Dioxin and Furans (D/Fs) because they are undesirable trace contaminants created within combustion process for which there is no viable process alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

Substance:	Formaldehyde			
CAS Number:	50-00-0			
	2017	Change from 2016	Change from 2016	
On a facility-wide basis:	t	t	%	
Amount that entered the facility as the substance itself or as				
a constituent of another substance:	0-1	0.000	0.0%	
The amount of substance that was created:	10-100	-0.850	-3.9%	
Released to air	*	-0.100	-2.5%	
Released to water	*	-0.155	-8.3%	
Released to land	*	0.000	0.0%	
On site disposal	*	0.001	25.2%	
Off site disposal	*	0.000	0.0%	
Off site recycling	*	0.000	0.0%	

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

### **Toxic Substance Reduction Plan Objective**

The Domtar Incorporated – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Domtar Incorporated – Espanola Mill intends to reduce its creation of Formaldehyde. Based on the information gathered in this report, the amount of Formaldehyde created is not expected to significantly increase.

### **Implemented Options**

Domtar installed in 2016 a CO monitor on its Bark Boiler. This additional monitor will allow for improved boiler control which could improve emissions.

Substance:	Hexachlorobenzene		
CAS Number:		118-74-1	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	g	g	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.000	0.0%
The amount of substance that was created:	1-10	-0.091	-5.3%
The amount of substance that was contained in product:	0-1	0.000	0.0%
Released to air	*	-0.091	-5.3%
Released to water	*	0.000	0.0%
Released to land	*	0.000	0.0%
On site disposal	*	0.000	0.0%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?** A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of HCB because it is an undesirable trace contaminant created within combustion process for which there is no viable process alternative. Based on the information gathered, the amount of HCB created is not expected to change. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

Substance:	Hexavalent chromium compounds		
CAS Number:		**	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	kg	kg	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.000	0.0%
The amount of substance that was created:	10-100	-2.877	-3.2%
The amount of substance that was contained in product:	0-1	0.000	0.0%
Released to air	*	-0.380	-5.8%
Released to water	*	-3.005	-8.3%
Released to land	*	0.000	0.0%
On site disposal	*	0.500	1.1%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Hexavalent Chromium because it is an undesirable trace contaminant created as a by-product of combustion for which there is no viable alternative. Based on the information gathered in this report, the amount of Hexavalent Chromium created is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:		Hydrochloric aci	d
CAS Number:	7647-01-0		
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	t	t	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	1-10	0.000	0.0%
The amount of substance that was created:	10-100	-1.089	-5.3%
The amount of substance that was contained in product:	0-1	0.000	0.0%
Released to air	*	-1.090	-5.3%
Released to water	*	0.000	0.0%
Released to land	*	0.000	0.0%
On site disposal	*	0.000	0.0%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period? A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### Toxic Substance Reduction Plan Objective

Domtar Inc. – Espanola Mill does not intend to reduce its use or creation of Hydrochloric Acid as no viable alternative could be identified. Based on the information gathered in this report, the amount of Hydrochloric Acid used and created is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

Substance:	Lead (and its compounds)		
CAS Number:		**	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	kg	kg	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	1,000-10,000	180.402	15.7%
The amount of substance that was created:	0-1	0.000	0.0%
The amount of substance that was contained in product:	10-100	-1.080	-1.2%
Released to air	*	-1.400	-9.2%
Released to water	*	-5.576	-8.3%
Released to land	*	0.000	0.0%
On site disposal	*	13.237	4.6%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### Toxic Substance Reduction Plan Objective

Domtar Inc. – Espanola Mill does not intend to reduce its use of this metal (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Based on the information gathered in this report, the amount of this metal (and its compounds) used is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Manganese (and its compounds)		
CAS Number:		**	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	t	t	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	10-100	3.366	16.1%
The amount of substance that was created:	0-1	0.000	0.0%
The amount of substance that was contained in product:	10-100	-0.013	-0.1%
Released to air	*	-0.005	-8.3%
Released to water	*	-2.702	-8.4%
Released to land	*	0.000	0.0%
On site disposal	*	7.453	19.6%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its use of this metal (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Based on the information gathered in this report, the amount of this metal (and its compounds) used is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials,

### **Implemented Options**

Substance:		Methanol		
CAS Number:		67-56-1		
	2017	Change from 2016	Change from 2016	
On a facility-wide basis:	 t	t	%	
Amount that entered the facility as the substance itself or as		-		
a constituent of another substance:	1,000-10,000	-58.669	-4.4%	
The amount of substance that was created:	1,000-10,000	-240.631		
The amount of substance that was contained in product:	0-1	0.000		
Released to air	*	-1.350	-0.4%	
Released to water	*	0.000	0.0%	
Released to land	*	0.000	0.0%	
On site disposal	*	0.333	31.7%	
Off site disposal	*	0.000	0.0%	
Off site recycling	*	0.000	0.0%	
*On-site releases from the facility to air, water and land, as w substances can be viewed by searching for this facility at http Was a Toxic Substance Reduction Plan prepared for this sub A toxic substance reduction plan was prepared for this substa	://www.ec.gc.ca/inrp-npr	i/default.asp?lang=ei ng period?	<b>e</b> ,	/e
<b>Toxic Substance Reduction Plan Objective</b> Domtar Inc. – Espanola Mill does not intend to reduce its use alternative could be identified. Based on the information gath Methanol used and created is not expected to significantly in	hered, the amount of			

### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Selenium		
CAS Number:		**	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	kg	kg	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	100-1,000	134.233	16.2%
The amount of substance that was created:	0-1	0.000	0.0%
The amount of substance that was contained in product:	100-1,000	-2.960	-1.2%
Released to air	*	-0.150	-7.9%
Released to water	*	-0.413	-8.3%
Released to land	*	0.000	0.0%
On site disposal	*	0.024	1.8%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?** A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its use of this metal (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Based on the information gathered in this report, the amount of this metal (and its compounds) used is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

Substance:		Sulphuric acid	
CAS Number:		7664-93-9	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	t	t	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	10,000-100,000	177.491	1.3%
The amount of substance that was created:	1-10	-0.444	-6.4%
The amount of substance that was contained in product:	0-1	0.000	0.0%
Released to air	*	-0.440	-6.4%
Released to water	*	0.000	0.0%
Released to land	*	0.000	0.0%
On site disposal	*	0.000	0.0%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its use or creation of Sulphuric Acid as no viable alternative could be identified. Based on the information gathered, the amount of Sulphuric Acid used and created is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Cobalt		
CAS Number:		**	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	0	0	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.070	0.2%
The amount of substance that was created:	0-1	0.000	0.0%
The amount of substance that was contained in product:	0-1	0.000	0.0%
Released to air	*	-0.100	-8.3%
Released to water	*	-2.555	-8.2%
Released to land	*	0.000	0.0%
On site disposal	*	21.851	23.8%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

\*\* no single CAS number applies to this substance

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?** A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its use or creation of Sulphuric Acid as no viable alternative could be identified. Based on the information gathered, the amount of Sulphuric Acid used and created is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

Substance:		Ammonia (tota	1)
CAS Number:		**	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	t	t	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.000	0.0%
The amount of substance that was created:	100-1,000	-45.761	-13.9%
The amount of substance that was contained in product:	0-1	0.000	0.0%
Released to air	*	-1.570	-5.0%
Released to water	*	-12.804	-17.7%
Released to land	*	0.000	0.0%
On site disposal	*	-0.011	-100.0%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Ammonia because it is an undesirable trace contaminant created as a byproduct within the pulping, chemical recovery, and wastewater treatment processes for which there is no viable alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Chlorine Dioxide		
CAS Number:		10049-04-4	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	t	t	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.000	0.0%
The amount of substance that was created:	1,000-10,000	244.216	2.8%
The amount of substance that was contained in product:	0-1	0.000	0.0%
Released to air	*	-0.030	-3.6%
Released to water	*	0.000	0.0%
Released to land	*	0.000	0.0%
On site disposal	*	0.000	0.0%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of Chlorine Dioxide because it is a required bleaching agent in the pulp making process for which there is no viable alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

Substance:		Methyl Isobutyl Ke	tone
CAS Number:		108-10-1	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	t	t	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.000	0.0%
The amount of substance that was created:	1-10	-0.103	-4.3%
The amount of substance that was contained in product:	0-1	0.000	0.0%
Released to air	*	-0.050	-3.0%
Released to water	*	0.000	-8.6%
Released to land	*	0.000	0.0%
On site disposal	*	0.000	22.2%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

### **Toxic Substance Reduction Plan Objective**

The Domtar Incorporated – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Domtar Incorporated – Espanola Mill intends to reduce its creation of Methyl Isobutyl Ketone. Based on the information gathered in this report, the amount of Methyl Isobutyl Ketone created is not expected to significantly increase.

### **Implemented Options**

Domtar installed in 2016 a CO monitor on its Bark Boiler. This additional monitor will allow for improved boiler control which could improve emissions.

Substance:	Hydrogen sulphide		
CAS Number:		7783-06-4	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	t	t	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.000	0.0%
The amount of substance that was created:	100-1,000	-22.036	-6.2%
The amount of substance that was contained in product:	0-1	0.000	0.0%
Released to air	*	-1.920	-2.7%
Released to water	*	-0.087	-5.9%
Released to land	*	0.000	0.0%
On site disposal	*	0.004	26.5%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill will be reducing its creation of Hydrogen Sulphide through the addition of six more aerators in the Wastewater Treatment Process. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

Six additional aerators were installed in the effluent treatment system in 2014. This will improve oxygenation of the effluent, and reduce Hydrogen Sulphide formation. Liquor Sulphidity target has been lowered to 30%. This may reduce overall TRS and H2S formation in the Pulping, Chemical Recovery, and Wastewater Treatment processes.

Substance:		Nitrate Ion	
CAS Number:		**	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	t	t	%
Amount that entered the facility as the substance itself or as a consti	10-100	20.758	64.4%
The amount of substance that was created:	0-1	0.000	0.0%
The amount of substance that was contained in product:	0-1	0.000	0.0%
Released to air	*	0.000	0.0%
Released to water	*	0.000	0.0%
Released to land	*	0.000	0.0%
On site disposal	*	0.000	0.0%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period? A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its use of Nitrate Ion because it is a desirable substance within the Wastewater Treatment process and no viable alternative was identified. Nitrate Ion is created within the Wastewater Treatment process as a natural by-product of the Nitrogen cycle for which there is no viable alternative. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Phosphorus (total)			
CAS Number:		**		
	2017	Change from 2016	Change from 2016	
On a facility-wide basis:	t	t	%	
Amount that entered the facility as the substance itself or as a constituent of another substance:				
	10-100	49.274	61.1%	
he amount of substance that was created:	0-1	0.000	0.0%	
The amount of substance that was contained in product:	0-1	0.000	0.0%	
Released to air	*	-0.010	-7.1%	
Released to water	*	0.383	1.5%	
Released to land	*	0.000	0.0%	
Dn site disposal	*	2.962	8.2%	
Off site disposal	*	0.000	0.0%	
Off site recycling	*	0.000	0.0%	

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?** A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

### **Toxic Substance Reduction Plan Objective**

The Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. The Mill does not intend to reduce its use of Phosphorous because it is an undesirable trace contaminant in raw materials (wood chips, bark, and chemicals) for which there is no viable alternative and used within the Wastewater Treatment process to promote wastewater treatment for which there is no viable alternative. Based on the information gathered in this report, the amount of Phosphorous in the feedstock is not expected to significantly increase. Phosphorous used at the wastewater treatment plant is expected to increase as a result of studies indicating a phosphorous deficiency.

### **Implemented Options**

### Carbon Monoxide Substance: CAS Number: 630-08-0 2017 Change from 2016 Change from 2016 On a facility-wide basis: % t Amount that entered the facility as the substance itself or as a constituent of another substance: 0-1 0.000 0.0% The amount of substance that was created: 1,000-10,000 -79.088 -5.4% -79.084 -5.4% Released to air Released to water 0.000 0.0% \* Released to land 0.000 0.0% On site disposal 0.000 0.0% \* Off site disposal \* 0.000 0.0% \* 0.000 0.0% Off site recycling \*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en. Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period? A toxic substance reduction plan was prepared for this substance for the 2012 reporting period. **Toxic Substance Reduction Plan Objective** Carbon Monoxide is created and released on-site through the combustion of various fuels for Chemical Recovery, Power Generation and Ancillary processes such as building heating requirements. In Kraft pulp mills and pulp mills that practice either oxygen delignification or pulp bleaching with chlorine dioxide (ClO2), CO is also formed during these delignification processes and released to the atmosphere. Carbon Monoxide is not found within material feedstock used by the Kraft pulp manufacturing operation. **Implemented Options** Domtar installed in 2016 a CO monitor on its Bark Boiler. This additional monitor will allow for improved boiler control which could improve emissions. Substance: Nitrogen oxides (expressed as NO2) 11104-93-1 CAS Number: 2017 Change from 2016 Change from 2016 On a facility-wide basis: % Amount that entered the facility as the substance itself or as a constituent of another substance: 0-1 0.000 0.0% The amount of substance that was created: 1,000-10,000 -6.018 -0.4% Released to air -6.014 -0.4% 0.0% Released to water \* 0.000 \* Released to land 0.000 0.0% 0.0% On site disposal 0.000 Off site disposal 0.000 0.0% \* Off site recycling 0.000 0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

### **Toxic Substance Reduction Plan Objective**

The Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Domtar Incorporated – Espanola Mill does not intend to reduce its creation of Nitrogen Oxides as no viable alternative was identified.

### **Implemented Options**

Substance:		PM2.5	
CAS Number:		**	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	t	t	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.000	0.0%
The amount of substance that was created:	10,000-100,000	-1949.157	-7.6%
Released to air	*	-25.040	-7.5%
Released to water	*	0.000	0.0%
Released to land	*	0.000	0.0%
On site disposal	*	0.000	0.0%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Incorporated – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Domtar Incorporated – Espanola Mill does intend to reduce its creation of PM2.5.

### **Implemented Options**

Domtar intends to install a CO monitor on the Bark Boiler to reduce emissions including PM2.5

Substance:		PM10	
CAS Number:		**	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	t	t	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.000	0.0%
The amount of substance that was created:	10,000-100,000	-2562.737	-6.9%
Released to air	*	-34.750	-7.1%
Released to water	*	0.000	0.0%
Released to land	*	0.000	0.0%
On site disposal	*	0.000	0.0%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period? A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Incorporated – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Domtar Incorporated – Espanola Mill intends to reduce its creation of PM10.

### Implemented Options

Domtar intends to install a CO monitor on the Bark Boiler to reduce emissions including PM10.

Substance: CAS Number:	Sulphur dioxide 7446-09-5
	2017 Change from 2016 Change from 2016
On a facility-wide basis:	t t %

Amount that entered the facility as the substance itself or as a constituent of another substance: The amount of substance that was created: Released to air Released to water Released to land On site disposal Off site disposal Off site recycling

t	t	%
0-1	0.000	0.0%
100-1,000	-7.539	-3.2%
*	-7.542	-3.2%
*	0.000	0.0%
*	0.000	0.0%
*	0.000	0.0%
*	0.000	0.0%
*	0.000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Incorporated – Espanola Mill intends to reduce its creation of Sulphur Dioxide from the Recovery Boiler. Domtar Incorporated – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

Improved Operating Practices consisting of; Liquor Sulphidity target was lowered and Recovery Boiler liquor temperature and bed temperature were optimized. These options will reduce the creation of Sulphur Dioxide from the Recovery boiler.

Substance:		Total Particulate Ma	atter
CAS Number:		**	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	t	t	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.000	0.0%
The amount of substance that was created:	10,000-100,000	-4433.228	-6.5%
Released to air	*	-56.960	-6.7%
Released to water	*	0.000	0.0%
Released to land	*	0.000	0.0%
On site disposal	*	0.000	0.0%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

### **Toxic Substance Reduction Plan Objective**

The Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Domtar Incorporated – Espanola Mill intends to reduce its creation of Total Particulate Matter.

### Implemented Options

Domtar installed in 2016 a CO monitor on its Bark Boiler. This additional monitor will allow for improved boiler control which could improve emissions.

Substance:		Ethyl Alcohol	
AS Number:		64-17-5	
	2017	Change from 2016	-
On a facility-wide basis:	t	t	%
Amount that entered the facility as the substance itself or as		0.000	0.00/
a constituent of another substance:	0-1	0.000	0.0%
The amount of substance that was created:	1-10	-0.456	-6.8%
Released to air	*	-0.310	-5.3%
Released to water	*	0.000	0.0%
Released to land	*	0.000	0.0%
Dn site disposal	*	0.000	0.0%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%
The Domtar Incorporated – Espanola Mill is committed to develop esources and energy. Domtar Incorporated – Espanola Mill inten gathered in this report, the amount of Ethyl alcohol created is not	ds to reduce its creati	on of Ethyl Alcohol.	
I <b>mplemented Options</b> Domtar installed in 2016 a CO monitor on its Bark Boiler. This add mprove emissions.	litional monitor will al	low for improved boil	ler control which could
Substance:			
CAS Number:		Isonronyl Alcoho	
		Isopropyl Alcoho 67-63-0	bl
		Isopropyl Alcoho 67-63-0	
	2017		
)n a facility-wide basis:	2017 t	67-63-0	
		67-63-0 Change from 2016	Change from 2016
On a facility-wide basis: Amount that entered the facility as the substance itself or as a constituent of another substance:		67-63-0 Change from 2016	Change from 2016

The amount of substance that was created: Released to air Released to water Released to land On site disposal Off site disposal Off site recycling

2017	Change Ironi 2010	Change Ironi 2010
t	t	%
0-1	0.000	0.0%
1-10	-0.401	-7.0%
*	-0.290	-6.3%
*	0.000	0.0%
*	0.000	0.0%
*	0.000	0.0%
*	0.000	0.0%

0.000

0.0%

\*

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period? A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

### **Toxic Substance Reduction Plan Objective**

The Domtar Incorporated – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Domtar Incorporated – Espanola Mill intends to reduce its creation of Isopropyl Alcohol. Based on the information gathered in this report, the amount of Isopropyl alcohol created is not expected to significantly increase.

Implemented Options Domtar installed in 2016 a CO monitor on its Bark Boiler. This additional monitor will allow for improved boiler control which could improve emissions.

Substance:		D-Limonene		
CAS Number:	5989-27-5			
	2017	Change from 2016	Change from 2016	
On a facility-wide basis:	t	t	%	
Amount that entered the facility as the substance itself or as				
a constituent of another substance:	1-10	-0.184	-2.2%	
The amount of substance that was created:	0-1	0.000	0.0%	
Released to air	*	-0.183	-2.1%	
Released to water	*	0.000	0.0%	
Released to land	*	0.000	0.0%	
On site disposal	*	0.000	0.0%	
Off site disposal	*	0.000	0.0%	
Off site recycling	*	0.000	0.0%	

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

### **Toxic Substance Reduction Plan Objective**

The Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Domtar Incorporated – Espanola Mill does not intend to reduce its use of D-Limonene because it is an undesirable trace contaminant in raw materials (softwood chips) for which there is no viable alternative. Based on the information gathered in this report, the amount of D-Limonene used is expected to increase due to increased softwood pulp production.

### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:		Methyl Ethyl Keto	one
CAS Number:		78-93-3	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	t	t	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.000	0.0%
The amount of substance that was created:	10-100	-1.878	-6.5%
Released to air	*	-0.030	-1.1%
Released to water	*	-1.086	-8.3%
Released to land	*	0.000	0.0%
On site disposal	*	0.001	31.7%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Incorporated – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Domtar Incorporated – Espanola Mill intends to reduce its creation of Methyl Ethyl Ketone. Based on the information gathered in this report, the amount of Methyl Ethyl Ketone created is not expected to significantly increase. Incorporated

### **Implemented Options**

Domtar installed in 2016 a CO monitor on its Bark Boiler. This additional monitor will allow for improved boiler control which could improve emissions.

CAS Number:		Alpha-Pinene 80-56-8	
	2017	Change from 2016	Change from 2016
n a facility-wide basis:	t	t	%
mount that entered the facility as the substance itself or as			
constituent of another substance:	10-100	0.501	4.5%
he amount of substance that was created:	0-1	0.000	0.0%
eleased to air	*	0.501	4.5%
eleased to water	*	0.000	0.0%
eleased to land	*	0.000	0.0%
n site disposal	*	0.000	0.0%
ff site disposal	*	0.000	0.0%
f site recycling	*	0.000	0.0%
site recycling		0.000	01070
-site releases from the facility to air, water and land, as well a stances can be viewed by searching for this facility at http://w			
as a Toxic Substance Reduction Plan prepared for this substar oxic substance reduction plan was prepared for this substance			
		S period.	
xic Substance Reduction Plan Objective			
e Domtar Inc. – Espanola Mill is committed to developing and i	implementing measure	es to ensure sustainal	ole use of materials, r
nd energy. Domtar Incorporated – Espanola Mill does not inten	d to reduce its use of <i>i</i>	Alpha-Pinene because	e it is an undesirable f
ntaminant in raw materials (softwood chips) for which there is	no viable alternative.	Based on the informa	tion gathered in this
nount of Alpha-Pinene used is expected to increase due to incre			
nplemented Options			
o options were identified to be technically or economically feas	ible. Therefore, no op	tion was implemente	d for the reduction o
DStance.			
ustance.			
ustance.			
istance.			
		Reta-Pinene	
stance:		Beta-Pinene 127-91-3	
bstance:		Beta-Pinene 127-91-3	
ıbstance:			
ubstance:	2017		Change from 2016
ıbstance:	2017 t	127-91-3	Change from 2016 %
bstance: S Number:		127-91-3 Change from 2016	
bstance: S Number:		127-91-3 Change from 2016	
bstance: S Number:	t	127-91-3 Change from 2016 t	%
a facility-wide basis: nount that entered the facility as the substance itself or as onstituent of another substance: e amount of substance that was created:	t 1-10	127-91-3 Change from 2016 t 0.057 0.000	% 3.1% 0.0%
a facility-wide basis: nount that entered the facility as the substance itself or as constituent of another substance: e amount of substance that was created: eased to air	t 1-10 0-1	127-91-3 Change from 2016 t 0.057 0.000 0.054	% 3.1% 0.0% 2.9%
bstance: S Number: a facility-wide basis: nount that entered the facility as the substance itself or as constituent of another substance: e amount of substance that was created: leased to air leased to water	t 1-10 0-1 *	127-91-3 Change from 2016 t 0.057 0.000 0.054 0.000	% 3.1% 0.0% 2.9% 0.0%
bstance: S Number: a facility-wide basis: mount that entered the facility as the substance itself or as constituent of another substance: le amount of substance that was created: leased to air leased to water leased to land	t 1-10 0-1 *	127-91-3 Change from 2016 t 0.057 0.000 0.054 0.000 0.000	% 3.1% 0.0% 2.9% 0.0% 0.0%
bstance: S Number: a facility-wide basis: nount that entered the facility as the substance itself or as constituent of another substance: e amount of substance that was created: leased to air leased to water leased to land n site disposal	t 1-10 0-1 * *	127-91-3 Change from 2016 t 0.057 0.000 0.054 0.000 0.000 0.000	% 3.1% 0.0% 2.9% 0.0% 0.0% 0.0%
a facility-wide basis: ount that entered the facility as the substance itself or as postituent of another substance: amount of substance that was created: eased to air eased to water eased to land site disposal site disposal	t 1-10 0-1 * * * *	127-91-3 Change from 2016 t 0.057 0.000 0.054 0.000 0.000 0.000 0.000	% 3.1% 0.0% 2.9% 0.0% 0.0% 0.0% 0.0%
tance: Number: facility-wide basis: unt that entered the facility as the substance itself or as nstituent of another substance: amount of substance that was created: ased to air ased to air ased to water ased to land ite disposal ite disposal	t 1-10 0-1 * * *	127-91-3 Change from 2016 t 0.057 0.000 0.054 0.000 0.000 0.000	% 3.1% 0.0% 2.9% 0.0% 0.0% 0.0%
a facility-wide basis: ount that entered the facility as the substance itself or as postituent of another substance: amount of substance that was created: eased to air eased to air eased to land site disposal site disposal site recycling	t 1-10 0-1 * * * * *	127-91-3 Change from 2016 t 0.057 0.000 0.054 0.000 0.000 0.000 0.000 0.000	% 3.1% 0.0% 2.9% 0.0% 0.0% 0.0% 0.0%
a facility-wide basis: ount that entered the facility as the substance itself or as onstituent of another substance: e amount of substance that was created: eased to air eased to water eased to land site disposal site disposal site recycling n-site releases from the facility to air, water and land, as well a	t 1-10 0-1 * * * * * *	127-91-3 Change from 2016 t 0.057 0.000 0.054 0.000 0.000 0.000 0.000 0.000 0.000	% 3.1% 0.0% 2.9% 0.0% 0.0% 0.0% 0.0% 0.0%
a facility-wide basis: a facility-wide basis: nount that entered the facility as the substance itself or as onstituent of another substance: e amount of substance that was created: leased to air leased to water leased to land site disposal f site disposal f site recycling n-site releases from the facility to air, water and land, as well a	t 1-10 0-1 * * * * * *	127-91-3 Change from 2016 t 0.057 0.000 0.054 0.000 0.000 0.000 0.000 0.000 0.000	% 3.1% 0.0% 2.9% 0.0% 0.0% 0.0% 0.0% 0.0%
bstance: S Number: a facility-wide basis: nount that entered the facility as the substance itself or as constituent of another substance: e amount of substance that was created: leased to air leased to water leased to land a site disposal f site disposal f site recycling m-site releases from the facility to air, water and land, as well a bstances can be viewed by searching for this facility at http://w	t 1-10 0-1 * * * * as on and off-site dispon vww.ec.gc.ca/inrp-npr	127-91-3 Change from 2016 t 0.057 0.000 0.054 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	% 3.1% 0.0% 2.9% 0.0% 0.0% 0.0% 0.0% 0.0%
bstance: S Number: a facility-wide basis: nount that entered the facility as the substance itself or as constituent of another substance: e amount of substance that was created: leased to air leased to air leased to land n site disposal f site disposal f site recycling On-site releases from the facility to air, water and land, as well a bstances can be viewed by searching for this facility at http://w as a Toxic Substance Reduction Plan prepared for this substar	t 1-10 0-1 * * * * as on and off-site disponention vww.ec.gc.ca/inrp-npr	127-91-3 Change from 2016 t 0.057 0.000 0.054 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	% 3.1% 0.0% 2.9% 0.0% 0.0% 0.0% 0.0% 0.0%
ibstance:	t 1-10 0-1 * * * * as on and off-site disponention vww.ec.gc.ca/inrp-npr	127-91-3 Change from 2016 t 0.057 0.000 0.054 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	% 3.1% 0.0% 2.9% 0.0% 0.0% 0.0% 0.0% 0.0%
Ibstance: AS Number: In a facility-wide basis: Inount that entered the facility as the substance itself or as constituent of another substance: Ite amount of substance that was created: Iteleased to air Iteleased to water Iteleased to land In site disposal If site disposal If site recycling Dn-site releases from the facility to air, water and land, as well a bstances can be viewed by searching for this facility at http://w as a Toxic Substance Reduction Plan prepared for this substance toxic substance reduction plan was prepared for this substance	t 1-10 0-1 * * * * as on and off-site disponention vww.ec.gc.ca/inrp-npr	127-91-3 Change from 2016 t 0.057 0.000 0.054 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	% 3.1% 0.0% 2.9% 0.0% 0.0% 0.0% 0.0% 0.0%
Ibstance: AS Number: In a facility-wide basis: Inount that entered the facility as the substance itself or as constituent of another substance: Ite amount of substance that was created: Iteleased to air Iteleased to water Iteleased to land In site disposal If site disposal If site recycling Dn-site releases from the facility to air, water and land, as well a bstances can be viewed by searching for this facility at http://w as a Toxic Substance Reduction Plan prepared for this substance toxic substance reduction plan was prepared for this substance	t 1-10 0-1 * * * * as on and off-site disponention vww.ec.gc.ca/inrp-npr	127-91-3 Change from 2016 t 0.057 0.000 0.054 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	% 3.1% 0.0% 2.9% 0.0% 0.0% 0.0% 0.0% 0.0%
As Number: As Number: As Number: nount that entered the facility as the substance itself or as constituent of another substance: the amount of substance that was created: teleased to air teleased to water teleased to land in site disposal if site disposal if site recycling On-site releases from the facility to air, water and land, as well a bstances can be viewed by searching for this facility at http://w as a Toxic Substance Reduction Plan prepared for this substance toxic substance Reduction Plan Objective	t 1-10 0-1 * * * as on and off-site disponent * as on and off-site disponent * * as on and off-site disponent * * * * * * * * * * * * *	127-91-3 Change from 2016 t 0.057 0.000 0.054 0.000	% 3.1% 0.0% 2.9% 0.0% 0.0% 0.0% 0.0% 0.0%
bstance: S Number: a facility-wide basis: nount that entered the facility as the substance itself or as constituent of another substance: e amount of substance that was created: leased to air leased to water leased to land a site disposal f site disposal f site recycling m-site releases from the facility to air, water and land, as well a bstances can be viewed by searching for this facility at http://w as a Toxic Substance Reduction Plan prepared for this substance ixic Substance Reduction Plan Objective e Domtar Inc. – Espanola Mill is committed to developing and i	t 1-10 0-1 * * * as on and off-site disponent * as on and off-site disponent * * as on and off-site disponent * * * * * * * * * * * * *	127-91-3 Change from 2016 t 0.057 0.000 0.054 0.0000 0.00000 0.00000 0.00000 0.0000 0.000000 0.0000	%   3.1%   0.0%   2.9%   0.0%
a facility-wide basis: S Number: a facility-wide basis: nount that entered the facility as the substance itself or as onstituent of another substance: e amount of substance that was created: leased to air leased to water leased to land site disposal i site disposal i site releases from the facility to air, water and land, as well a bostances can be viewed by searching for this facility at http://w as a Toxic Substance Reduction Plan prepared for this substance wic Substance Reduction Plan Objective e Domtar Inc. – Espanola Mill is committed to developing and if d energy Domtar Incorporated – Espanola Mill does not intend	t 1-10 0-1 * * * as on and off-site dispervention * * as on and off-site dispervention * * as on and off-site dispervention * * * * * * * * * * * * *	127-91-3 Change from 2016 t 0.057 0.000 0.054 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.00000 0.0000 0.000000	%   3.1%   0.0%   2.9%   0.0%
a facility-wide basis: ount that entered the facility as the substance itself or as onstituent of another substance: amount of substance that was created: eased to air eased to water eased to land site disposal site disposal site releases from the facility to air, water and land, as well a stances can be viewed by searching for this facility at http://w s a Toxic Substance Reduction Plan prepared for this substance price substance reduction plan was prepared for this substance ic Substance Reduction Plan Objective Domtar Inc. – Espanola Mill is committed to developing and is energy Domtar Incorporated – Espanola Mill does not intend	t 1-10 0-1 * * * as on and off-site dispervention * * as on and off-site dispervention * * as on and off-site dispervention * * * * * * * * * * * * *	127-91-3 Change from 2016 t 0.057 0.000 0.054 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.00000 0.0000 0.000000	%   3.1%   0.0%   2.9%   0.0%
a facility-wide basis: ount that entered the facility as the substance itself or as constituent of another substance: e amount of substance that was created: eased to air eased to water eased to land site disposal site disposal site recycling m-site releases from the facility to air, water and land, as well a bistances can be viewed by searching for this facility at http://w is a Toxic Substance Reduction Plan prepared for this substance oxic substance Reduction Plan Objective e Domtar Inc. – Espanola Mill is committed to developing and i	t 1-10 0-1 * * * as on and off-site dispervention * * as on and off-site dispervention * * as on and off-site dispervention * * * * * * * * * * * * *	127-91-3 Change from 2016 t 0.057 0.000 0.054 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.00000 0.0000 0.000000	% 3.1% 0.0% 2.9% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0

Substance:		Total Reduced Sulp	ohur
CAS Number:		**	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	t	t	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.000	0.0%
The amount of substance that was created:	1,000-10,000	-62.150	-6.2%
Released to air	*	-1.770	-1.3%
Released to water	*	-0.188	-5.9%
Released to land	*	0.000	0.0%
On site disposal	*	0.005	25.3%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill will be reducing its creation of Total Reduced Sulphur through the addition of six more aerators in the Wastewater Treatment Process. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

Six additional aerators were installed in the effluent treatment system in 2014. This will improve oxygenation of the effluent, and reduce TRS (H2S specifically) formation. Liquor Sulphidity target has been lowered to 30%. This may reduce overall TRS and H2S formation in the Pulping, Chemical Recovery, and Wastewater Treatment processes.

Substance: CAS Number:		Acetone 67-64-1	
On a facility-wide basis:	2017 t	Change from 2016 t	Change from 2016 %
Amount that entered the facility as the substance itself or as a constituent of another substance:	0-1	0.000	0.0%
The amount of substance that was created:	100-1,000	-9.280	-6.1%
Released to air	*	-0.370	-1.4%
Released to water	*	-0.040	-8.3%
Released to land	*	0.000	0.0%
On site disposal	*	0.001	29.9%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period? A toxic substance reduction plan was prepared for this substance for the 2012 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Incorporated – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy. Domtar Incorporated – Espanola Mill intends to reduce its creation of Acetone. Based on the information gathered in this report, the amount of Acetone created is not expected to significantly increase.

### Implemented Options

Domtar installed in 2016 a CO monitor on its Bark Boiler. This additional monitor will allow for improved boiler control which could improve emissions.

Substance:		Arsenic	
CAS Number:	7440-38-2		
On a facility-wide basis:	2017 kg	Change from 2016 kg	Change from 2016 %
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	100-1,000	55.026	13.3%
The amount of substance that was created:	0-1	0.000	0.0%
Released to air	*	0.460	109.5%
Released to water	*	-19.915	-8.3%
Released to land	*	0.000	0.0%
On site disposal	*	1.931	4.5%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its use of this metal (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Based on the information gathered in this report, the amount of this metal (and its compounds) used is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:		Mercury	
CAS Number:		7439-97-6	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	kg	kg	%
Amount that entered the facility as the substance itself or as		-	
a constituent of another substance:	10-100	2.117	14.9%
The amount of substance that was created:	0-1	0.000	0.0%
Released to air	*	-0.050	-4.7%
Released to water	*	-0.014	-8.4%
Released to land	*	0.000	0.0%
On site disposal	*	0.033	7.6%
Off site disposal	*	-6.000	0.0%
Off site recycling	*	0.000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?** A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its use of this metal (and its compounds) because it is an undesirable trace contaminant in raw materials (wood chips, natural gas and chemicals) for which there is no viable alternative. Based on the information gathered in this report, the amount of this metal (and its compounds) used is not expected to significantly increase. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

Substance:	Acetaldehyde		
CAS Number:		75-07-0	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	t	t	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.000	0.0%
The amount of substance that was created:	10-100	-1.867	-5.1%
Released to air	*	-0.370	-2.6%
Released to water	*	-0.040	-8.3%
Released to land	*	0.000	0.0%
On site disposal	*	0.001	27.7%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period? A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its use or creation of Acetaldehyde as it is an undesirable trace contaminant created within the manufacturing process for which there is no viable process alternative. Based on the information gathered in this report, the amount of Acetaldehyde created is not expected to change. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### Implemented Options

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Benzo(a)phenanthrene		
CAS Number:	218-01-9		
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	kg	kg	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.000	0.0%
The amount of substance that was created:	1-10	-0.402	-5.7%
Released to air	*	-0.400	-5.7%
Released to water	*	0.000	0.0%
Released to land	*	0.000	0.0%
On site disposal	*	-0.003	-8.2%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

**Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?** A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of PAHs because they are an undesirable trace contaminants created within the manufacturing process for which there is no viable process alternative. Based on the information gathered in this report, the amount of PAHs created is not expected to change. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

Substance:	Phenanthrene		
CAS Number:		85-01-8	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	kg	kg	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.000	0.0%
The amount of substance that was created:	100-1,000	-5.612	-5.5%
Released to air	*	-5.490	-5.4%
Released to water	*	0.000	0.0%
Released to land	*	0.000	0.0%
On site disposal	*	-0.117	-8.3%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

# Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period? A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of PAHs because they are an undesirable trace contaminants created within the manufacturing process for which there is no viable process alternative. Based on the information gathered in this report, the amount of PAHs created is not expected to change. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Acenaphtylene		
CAS Number:		208-96-8	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	kg	kg	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.000	0.0%
The amount of substance that was created:	10-100	-2.608	-5.6%
Released to air	*	-2.490	-5.5%
Released to water	*	0.000	0.0%
Released to land	*	0.000	0.0%
On site disposal	*	-0.114	-8.3%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period? A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of PAHs because they are an undesirable trace contaminants created within the manufacturing process for which there is no viable process alternative. Based on the information gathered in this report, the amount of PAHs created is not expected to change. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

CAS Number:		206-44-0	
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	kg	kg	%
mount that entered the facility as the substance itself or as			
constituent of another substance:	0-1	0.000	0.0%
The amount of substance that was created:	10-100	-1.793	-5.6%
Released to air	*	-1.690	-5.5%
Released to water	*	0.000	0.0%
Released to land	*	0.000	0.0%
On site disposal	*	-0.104	-8.3%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%
** no single CAS number applies to this substance			

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of PAHs because they are an undesirable trace contaminants created within the manufacturing process for which there is no viable process alternative. Based on the information gathered in this report, the amount of PAHs created is not expected to change. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### Implemented Options

No options were identified to be technically or economically feasible. Therefore, no option was implemented for the reduction of this substance.

Substance:	Pyrene		
CAS Number:	129-00-0		
	2017	Change from 2016	Change from 2016
On a facility-wide basis:	kg	kg	%
Amount that entered the facility as the substance itself or as			
a constituent of another substance:	0-1	0.000	0.0%
The amount of substance that was created:	10-100	-1.624	-6.3%
Released to air	*	-1.000	-4.2%
Released to water	*	-0.127	-8.3%
Released to land	*	0.000	0.0%
On site disposal	*	-0.013	-8.3%
Off site disposal	*	0.000	0.0%
Off site recycling	*	0.000	0.0%

\*On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling for any of the above substances can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/default.asp?lang=en.

### Was a Toxic Substance Reduction Plan prepared for this substance during the reporting period?

A toxic substance reduction plan was prepared for this substance for the 2011 reporting period.

### **Toxic Substance Reduction Plan Objective**

Domtar Inc. – Espanola Mill does not intend to reduce its creation of PAHs because they are an undesirable trace contaminants created within the manufacturing process for which there is no viable process alternative. Based on the information gathered in this report, the amount of PAHs created is not expected to change. Domtar Inc. – Espanola Mill is committed to developing and implementing measures to ensure sustainable use of materials, resources and energy.

### **Implemented Options**

As of June 1, 2018, I, Carol Lapointe, certify that I have read the reports on the toxic substance reduction plans for the toxic substances referred to below 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.

Acetone Alpha Pinene Ammonia (total) Beta Pinene Cadmium Carbon Monoxide

### Chlorine Dioxide

2,3,7,8-Tetrachlorodibenzo-p-dioxin 1,2,3,7,8-Pentachlorodibenzo-p-dioxin 1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin 1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin Methyl Ethyl Ketone Octachlorodibenzo-p-dioxin 2,3,7,8-Tetrachlorodibenzofuran 2,3,4,7,8-Pentachlorodibenzofuran 1,2,3,7,8-Pentachlorodibenzofuran 1,2,3,4,7,8-Hexachlorodibenzofuran 1,2,3,7,8,9-Hexachlorodibenzofuran 1,2,3,6,7,8-Hexachlorodibenzofuran 2,3,4,6,7,8-Hexachlorodibenzofuran 1,2,3,4,6,7,8-Heptachlorodibenzofuran 1,2,3,4,7,8,9-Heptachlorodibenzofuran

Octachlorodibenzofuran Ethyl Alcohol Arsenic Formaldehyde Hexachlorobenzene Hexavalent chromium compounds Hydrochloric acid Hydrogen Sulphide Isopropyl Alcohol Lead D-Limonene Manganese Methanol Nitrogen Oxides Nitrate Ion Phosphorus (total)  $PM_{2.5}$ PM<sub>10</sub> Selenium Sulphur Dioxide Sulphuric acid Total Reduced Sulphuric **Total Particulate Matter** 

Acetaldehyde Benzo(a)phenanthrene Phenathrene Acenaphtylene Fluoranthene Pyrene Methyl Isobutyl Ketone

The original version of the toxic substance reduction plan is signed off by: Highest Ranking Employee:	Carol Lapointe
Title:	General Manager
Phone Number:	705-869-2020

The legal and trade names of the owner and the operator of	Domtar Inc.
the facility, the street address of the facility and the mailing	1 Station Road
address of the facility	Espanola, ON P5E 1R6
Facility NPRI identification number	3185
The identification number assigned to the facility by the	
Ministry of the Environment for the purposes of Ontario	5114
Regulation 127/01.	
Number of full-time employees	538
North American Industry Classification System (NAICS) - 2, 4, 31-33	3221 322121
and 6 digit codes	
The name, position and telephone number of the individual	
who is the contact at the facility for the public:	
Public Contact	Bonnie Skene
Title	Public Affairs Manager
Phone Number	807-223-9035
	807 223 5055
UTM coordinates, x and y	X 440796 Y 5124122
UTM Zone	17
Datum	NAD27
Legal name of Canadian parent company, if your facility is a	
subsidiary of a Canadian parent company	
Parent company name	Domtar Inc.
Address	395, de Maisonneuve Blvd. West
City	Montreal
Province	Quebec
Postal Code	
Fusial Code	H3A 1L6
Percent Ownership	H3A 1L6 100%

