<u>Toxic Substance Reduction Plan Summaries</u> <u>for 2012 Reporting Year</u>

Novelis Inc. - Kingston Works

Basic Facility Information

Lawal C Tuada Nama of Campana	Marratia Inc	
Legal & Trade Name of Company	Novelis Inc.	
Company Street Address/Mailing Address	Novelis Corporation (100% ownership) 3560 Lenox Road, Suite 2000, Atlanta, GA, United States 30326	
Company Business Number	849087549	
Facility Street Address/Mailing Address	1 Lappan's Lane, Kingston, Ontario, Canada K7L 4Z5	
NPRI Identification Number	4197	
Reg. 127 Reporting ID Number	Not applicable	
Number of Full-Time Employees	250	
NAICS code	(Two-digit): 31-33 (Four-digit): 3313 (Six-digit): 331317	
Spatial Co-ordinates of Facility	(44.2498, -76.5153) - NAD83 Datum	
Public Contact Person	Mr. Jacob Czyz, Plant Manager Telephone: (613) 541-7056 Facsimile: (613) 541-7003	

Toxic Substances Present

List of Toxic Substances Present at Facility	CAS Registry Number
White Mineral Oil	8042-47-5
Total Particulate Matter, PM	Not applicable
Particulate Matter <= 10 microns, PM10	Not applicable
Particulate Matter <= 2.5 microns, PM2.5	Not applicable
Manganese, and its compounds	Not applicable

Planner Information

This Toxic Substance Reduction (TSR) Plans were certified by Ms. Danielle Arsenault of AECOM, a licensed Toxic Substance Reduction Planner. Reduction option recommendations for each TSR Plan were also provided by Ms. Arsenault, in consultation with Novelis. Ms. Arsenault's license information is provided below.

Name	Danielle Arsenault
Company	AECOM
License Number	TSRP0289

White Mineral Oil, CAS No. 8042-47-5

Statement of Intent

Novelis strives to maintain compliance with municipal, provincial and federal law, as well as any corporate requirements with respect to the control of its environmental aspects. Novelis is committed to optimizing the usage of the white mineral oil to ensure that all releases via air and waste are minimized. White mineral oil is the main component in its lubricant which is essential to the production of its aluminum coil products. At this time, Novelis cannot implement any technically and economically feasible reduction options to reduce its use of white mineral oil.

Objectives of Plan and Toxic Reduction Target

Novelis will continue to strive to optimize the usage of white mineral oil through reclaiming the substance on-site and distilling it for further use. Efforts already implemented by Novelis reflect standard and best management industry practices, including implementation of ISO 14001 and waste management and reduction as part of the Facility's objective of continual improvement. No specific reduction target has been set for the toxic reduction of white mineral oil.

Description of White Mineral Oil Use at Facility

The white mineral oil is applied at the rolling operations and at the finishing line to provide lubrication and reduce friction.

Toxic Reduction Options

The Facility reviewed and considered potential options in each of the seven (7) reduction options categories. No technically feasible or economically viable options were identified.

Implementation Plan

Since no options were identified for implementation, a timeline was not prepared.

Plan Summary

This plan summary accurately reflects the contents of the Facility's Toxic Substance Reduction Plan that was prepared by AECOM for white mineral oil, dated December 6, 2013.

White Mineral Oil, CAS No. 8042-47-5

2012 Toxic Substance Accounting on a Facility Wide Basis		
Amount of substance that entered the Facility as the substance itself or as a constituent of another substance:	>100 to 1000 tonnes	
Amount of substance that was created at the Facility:	0 tonnes	
Amount of substance that was contained in product:	0 tonnes	

On-site releases from the Facility to: air, water, land, on-site and off-site disposal, off-site recycling (if applicable) can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/

Particulate Matter <= 10 microns (PM10), CAS No. not available

Statement of Intent

Novelis strives to maintain compliance with municipal, provincial and federal law, as well as any corporate requirements with respect to the control of its environmental aspects. Novelis is committed to optimizing the usage of its equipment and fuel, and maintaining the equipment in excellent working order to ensure all releases of particulate matter less than 10 microns (PM10) to air are minimized. At this time, Novelis cannot implement any technically and economically feasible reduction options to reduce its creation of PM10.

Objectives of Plan and Toxic Reduction Target

Novelis will continue to strive to optimize the usage of equipment that releases PM10 through preventative maintenance and using the equipment only when needed. Efforts already implemented by Novelis reflect standard and best management industry practices, including implementation of ISO 14001 and waste management and reduction as part of the Facility's objective of continual improvement. No specific reduction target has been set for the toxic reduction of PM10.

Description of PM10 Creation at Facility

This substance is created by the operation of combustion equipment that utilizes natural gas and diesel fuels for the purposes of process heat, comfort heating and for emergency power. It is also emitted as an air release from the Cold Mill production operations and from the use of two cooling towers on-site. In addition, it is generated from maintenance welding activities.

Toxic Reduction Options

The Facility reviewed and considered potential options in each of the seven (7) reduction options categories. No technically feasible or economically viable options were identified.

Implementation Plan

Since no options were identified for implementation, a timeline was not prepared.

Plan Summary

This plan summary accurately reflects the contents of the Facility's Toxic Substance Reduction Plan that was prepared by AECOM for PM10, dated December 6, 2013.

Particulate Matter <= 10 microns (PM10), CAS No. not available

2012 Toxic Substance Accounting		
on a Facility Wide Basis		
Amount of substance that entered the Facility as the substance itself or as a constituent of another substance:	0 tonnes	
Amount of substance that was created at the Facility:	>0 to 10 tonnes	
Amount of substance that was contained in product:	0 tonnes	

On-site releases from the Facility to: air, water, land, on-site and off-site disposal, off-site recycling (if applicable) can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/

Particulate Matter <= 2.5 microns (PM2.5), CAS No. not available

Statement of Intent

Novelis strives to maintain compliance with municipal, provincial and federal law, as well as any corporate requirements with respect to the control of its environmental aspects. Novelis is committed to optimizing the usage of its equipment and fuel, and maintaining the equipment in excellent working order to ensure all releases of particulate matter less than 2.5 microns (PM2.5) to air are minimized. At this time, Novelis cannot implement any technically and economically feasible reduction options to reduce its creation of PM2.5.

Objectives of Plan and Toxic Reduction Target

Novelis will continue to strive to optimize the usage of equipment that releases PM2.5 through preventative maintenance and using the equipment only when needed. Efforts already implemented by Novelis reflect standard and best management industry practices, including implementation of ISO 14001 and waste management and reduction as part of the Facility's objective of continual improvement. No specific reduction target has been set for the toxic reduction of PM2.5.

Description of PM2.5 Creation at Facility

This substance is mainly created by the operation of combustion equipment that utilizes natural gas and diesel fuels for the purposes of process heat, comfort heating and for emergency power. It is also released as an air emission from the Cold Mill operations.

Toxic Reduction Options

The Facility reviewed and considered potential options in each of the seven (7) reduction options categories. No technically feasible or economically viable options were identified.

Implementation Plan

Since no options were identified for implementation, a timeline was not prepared.

Plan Summary

This plan summary accurately reflects the contents of the Facility's Toxic Substance Reduction Plan that was prepared by AECOM for PM2.5, dated December 6, 2013.

Particulate Matter <= 2.5 microns (PM2.5), CAS No. not available

2012 Toxic Substance Accounting on a Facility Wide Basis		
Amount of substance that entered the Facility as the substance itself or as a constituent of another substance:	0 tonnes	
Amount of substance that was created at the Facility:	0 > 1 tonne	
Amount of substance that was contained in product:	0 tonnes	

On-site releases from the Facility to: air, water, land, on-site and off-site disposal, off-site recycling (if applicable) can be viewed by searching for this facility at http://www.ec.gc.ca/inrp-npri/

Certification Statements

The certification statements from the highest ranking employee at the Facility and Toxic Reduction Planner are provided on the following page.