

SUMMARY

TOXIC SUBSTANCE REDUCTION PLANS

**MERIDIAN LIGHTWEIGHT
TECHNOLOGIES INC.**

800 WRIGHT STREET

STRATHROY

PM2.5

December 13, 2013

Statement of Intent and Objectives of the Plan

Statement of Intent: PM2.5 is currently created by Meridian in multiple processes involving the Wright Street facility. We intend to reduce the creation of PM2.5 at this facility. There are no technically or economically feasible options identified for implementation for the Meridian Wright Street facility for reduction of the creation of PM2.5 at this time.

Objective: Meridian operates the Wright Street facility with the commitment to minimizing the impacts of the operations on the employees, the environment and the surrounding community. Meridian will continue to pursue options that are technically and economically achievable for the reduction of the creation of PM2.5 at this facility.

Meridian casts, machines and assembles magnesium and aluminum alloy parts according to customer specifications. Ingots of magnesium alloy and of aluminum alloy are melted, cast and machined according to the product specifications prior to shipment to the customer. Raw materials delivered from suppliers and finished products shipped to customers are transported by truck. Vehicle movements in the paved yard areas generate road dust and create PM2.5. Forktrucks fuelled with natural gas handle material movements. During the combustion of the natural gas PM2.5 are created. Certain of the melting furnaces are fuelled by natural gas. Combustion of the natural gas creates PM2.5. As part of the casting process, dross is removed from the melting crucibles and molten magnesium is removed along with the dross. Oxidation of the molten magnesium generates fumes and PM2.5 is created. Cooling is applied in the casting process to promote solidification of the molten metal. The cooling water is supplied from cooling towers which emit water droplets in the exhausted air used to cool the water. When the emitted water droplets vapourize PM2.5 is created. Heating equipment fuelled with natural gas is used to maintain temperatures within the facility structures. Combustion of the natural gas creates PM2.5.

Facility Information

Facility Name:	Meridian Lightweight Technologies Inc.
NPRI Identification Number:	7675
Two Digit NAICS Code:	33
Four Digit NAICS Code:	3315
Six Digit NAICS Code:	331523
Number of Full-time Employees:	160
UTM Spatial Coordinates (NAD83):	Latitude: 449508 Longitude: 4759827 Datum: NAD 83

Owner of the Facility Information

Name: Meridian Lightweight Technologies Inc.

Operator of the Facility Information

Name: Meridian Lightweight Technologies Inc.
Address: 155 High Street E., Strathroy ON N7G 1H4
Phone Number: (519) 245-4040 x244
Fax Number: (519) 245-4620
Email: dlyons@meridian-mag.com

Toxic Substances for Which Facility Must Prepare Plan:

Substance 1	PM2.5
CAS Number:	**
Substance 2	Copper (2011)
CAS Number:	**
Substance 23	Manganese (2011)
CAS Number:	**

Public Contact

Name: Don Lyons
Position: HSE Specialist
Address: 155 High St. E., Strathroy, ON N7G 1H4
Phone Number: (519) 245-4040 x 69515
Fax Number: (519) 245-4620
Email: dlyons@meridian-mag.com

There have been no options for reduction of the creation of PM2.5 selected for implementation at this time due to the nature of the processes where the creations are taking place and the mechanisms involved in the creations.

This Plan Summary accurately reflects the content of the Toxic Substance Reduction Plan dated December 13, 2013, prepared for PM2.5 at Meridian, Wright Street.

As of December 18, 2013, I, Randy Chalmers, certify that I have read the toxic substance reduction plans for the toxic substances referred to below and am familiar with their contents, and to my knowledge the plans are factually accurate and comply with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

PM2.5



Randy Chalmers
General Manager, Meridian Lightweight Technologies Inc.
(Highest Ranking Employee)

12/18/13
Date

As of December 18, 2013, I, Tim Boose, certify that I am familiar with the processes at Meridian Lightweight Technologies Inc. that use or create the toxic substances referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (1) of the Toxics Reduction Act, 2009 that are set out in the plan dated December 13, 2013 and that the plans comply with that Act and Ontario Regulation 455/09 (General) made under that Act.

PM2.5



Tim Boose
Toxic Substance Reduction Planner
Licence # TSRP0095

Dec 18/13
Date