

1. Basic Facility Information

Name & CAS # of Substance	Manganese (and its compounds) PM10 PM2.5	NA-09 NA-M09 NA-M10
Facility Identification and Site Address		
Company Name	Flex-N-Gate Howard	
Facility Name		
Facility Address	1425 Howard Avenue Windsor, ON N8X 5C9	
Spatial Coordination of Facility	4685398 N, 333318 E, Zone 17	
Number of Employees	300	
NPRI ID	11076	
Parent Company (PC) Information		
PC Name & Address	NA	
Percent Ownership for each PC		
Business Number for PC	NA	
Primary North American Industrial Classification System Code (NAICS)		
2 Digit NAICS Code	31-33 – Manufacturing	
4 Digit NAICS Code	3369 – Other transportation equipment manufacturing	
6 Digit NAICS Code	336390 – Other transportation equipment manufacturing	
Company Contact Information		
Facility Public Contact	Mr. John Whatley, H&S Manager	
	jwhatley@flexngate.com	
	Phone: (519) 258-3509 x10514	
	Fax: (519) 258-3238	
Facility Technical Contact:	H&S Manager	
	jwhatley@flexngate.com	
	Phone: (519) 258-3509 x10514	
	Fax: (519) 258-3238	
Company Coordinator Contact:	Mr. John Whatley, H&S Manager	
	jwhatley@flexngate.com	
	Phone: (519) 258-3509 x10514	
	Fax: (519) 258-3238	

Person who Prepared the Plan: (if different from the Coordinator)	Pete Tremblay, EIT
	GHD Limited 184 Front Street East Toronto, ON M5A 4N3
	peter.tremblay@ghd.com
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	Fax: (519) 884-0525
Highest Ranking Employee	Mr. Roger Verscheure, General Manager
	rverscheure@flexngate.com
	Phone: (519) 258-3509 EXT 10502 Fax: (519) 258-3238
Planner Responsible for Making Recommendations (Manganese)	Tara Bailey, P. Eng.
	GHD Limited 651 Colby Drive Waterloo ON N2V 1C2
	Planner License No: TSRP0159
	tara.bailey@ghd.com
	Phone: (519) 884-0510 Fax: (519) 884-0525
Planner Responsible for Making Recommendations (PM2.5, PM10)	Erik Martinez, P. Eng.
	GHD Limited 651 Colby Drive Waterloo ON N2V 1C2
	Planner License No: TSRP0005
	Erik.Martinez@ghd.com
	Phone: (519) 884-0510 Fax: (519) 884-0525
Planner Responsible for Certification (Manganese)	Tara Bailey, P. Eng.
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Planner Responsible for Certification (PM2.5, PM10)	Erik Martinez, P. Eng.
	Planner License No: TSRP0005
	Erik.Martinez@ghd.com
	Phone: (519) 884-0510 Fax: (519) 884-0525

2. Plan Certification

Certification by Highest Ranking Employee

As of March 29, 2016, I, Roger Verscheure, certify that I have read the toxic substance reduction plan for the toxic substances referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the *Toxics Reduction Act, 2009* and Ontario Regulation 455/09 (General) made under that Act.

Manganese

PM10

PM2.5



Roger Verscheure

General Manager

Flex-N-Gate Howard

Certification by Licensed Planner

As of March 29, 2016, I, Tara Bailey, certify that I am familiar with the processes at Flex-N-Gate Howard Division 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 March 29, 2016 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Manganese



Tara Bailey, P. Eng.

Licensed Toxic Reduction Planner, License # TSRP0159

GHD Limited

Certification by Licensed Planner

As of March 29, 2016, I, Erik Martinez, certify that I am familiar with the processes at Flex N Gate Howard 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 March 29, 2016 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

PM10

PM2.5



Erik Martinez, P. Eng.

Licensed Toxic Reduction Planner, License # TSRP0005

GHD Limited

1. Introduction

1.1 Statement of Intent

The Flex |N| Gate (FNG) Howard facility (Facility) uses Manganese (and its compounds), in four processes. The Manganese is received at the Facility then stamped, welded and shipped to the customer. The Facility also creates Particulate Matter <10 µm (PM10) and Particulate Matter <2.5 µm (PM2.5) during welding. The Facility does not intend to reduce the creation of this toxic substance at the Facility.

1.2 Objectives

FNG is committed to continual improvement of its Environmental Management System (EMS), which includes waste minimization, the prevention of pollution, and compliance with all relevant federal, provincial and local environmental regulations. This plan will determine the technical and economic feasibility of each identified option to determine which, if any, are viable for implementation at this time. As part of the continuous improvement practices at the facility, technical advances will be monitored for new opportunities for reduction.

1.3 Facility Description

FNG manufactures automotive parts and related components. The North American Industry Classification System (NAICS) Code that applies to this Facility is 336390 – Other Motor Vehicle Part Manufacturing.

In 2014, the Facility operated their manufacturing process 24 hours per day, 5 days per week, 50 weeks per year.

Table 13

**Summary of Reasons for Changes from 2013 to 2014 for Amount That Enters Process
Flex-N-Gate Howard
Windsor, Ontario**

Compound	CAS No.	2013 Entered Process (kg/year)	2014 Entered Process (kg/yr)	Change 2013-2014 (%)	NPRI Code	Entered Process Description
Manganese (and its compounds)	NA	30,825	30,825	0%	H	No Significant Change
PM10	NA	0	0	0%	H	No Significant Change
PM2.5	NA	0	0	0%	H	No Significant Change

NPRI Software Reasons for Change must be selected from the following list for each reportable substance:

- | | |
|-------------------------------------|--|
| A - Changes in Production Levels | F - Changes in Off-Site Transfers for Recycling |
| B - Changes in Estimation Methods | G - Other (specify in comments field B14.2) |
| C - Pollution Prevention Activities | H - No Significant Change (< 10%) or No Change |
| D - Changes in On-Site Treatment | I - Not Applicable (First year reporting this substance) |
| E - Changes in Disposal | |

Table 14

**Summary of Reasons for Changes from 2013 to 2014 for Off-Site Transfers
Flex-N-Gate Howard
Windsor, Ontario**

Compound	CAS No.	2013 Off-site Transfers (kg/year)	2014 Off-site Transfers (kg/yr)	Change 2013-2014 (%)	NPRI Code	Off-site Transfers Description
Manganese (and its compounds)	NA	2,292	2,292	0%	H	No Significant Change
PM10	NA	0	0	0%	H	No Significant Change
PM2.5	NA	0	0	0%	H	No Significant Change

Notes:

NPRI Software Reasons for Change must be selected from the following list for each reportable substance:

- | | |
|-------------------------------------|--|
| A - Changes in Production Levels | F - Changes in Off-Site Transfers for Recycling |
| B - Changes in Estimation Methods | G - Other (specify in comments field B14.2) |
| C - Pollution Prevention Activities | H - No Significant Change (< 10%) or No Change |
| D - Changes in On-Site Treatment | I - Not Applicable (First year reporting this substance) |
| E - Changes in Disposal | |

Table 15

**Summary of Reasons for Changes from 2013 to 2014 for Disposals
Flex-N-Gate Howard
Windsor, Ontario**

Compound	CAS No.	2013 Disposals (kg/year)	2014 Disposals (kg/yr)	Change 2013-2014 (%)	NPRI Code	Disposals Description
Manganese (and its compounds)	NA	0	0	0%	H	No Significant Change
PM10	NA	0	0	0%	H	No Significant Change
PM2.5	NA	0	0	0%	H	No Significant Change

Notes:

NPRI Software Reasons for Change must be selected from the following list for each reportable substance:

- | | |
|-------------------------------------|--|
| A - Changes in Production Levels | F - Changes in Off-Site Transfers for Recycling |
| B - Changes in Estimation Methods | G - Other (specify in comments field B14.2) |
| C - Pollution Prevention Activities | H - No Significant Change (< 10%) or No Change |
| D - Changes in On-Site Treatment | I - Not Applicable (First year reporting this substance) |
| E - Changes in Disposal | |

Table 16

**Summary of Reasons for Changes from 2013 to 2014 for Amounts Created
Flex-N-Gate Howard
Tecumseh, Ontario**

Compound	CAS No.	2013 Amount Created (kg/year)	2014 Amount Created (kg/yr)	Change 2013-2014 (%)	NPRI Code	Amount Created Description
Manganese (and its compounds)	NA	0	0	0%	H	No Significant Change
PM10	NA	7,110	7,110	0%	H	No Significant Change
PM2.5	NA	5,336	5,336	0%	H	No Significant Change

Notes:

NPRI Software Reasons for Change must be selected from the following list for each reportable substance:

- | | |
|-------------------------------------|--|
| A - Changes in Production Levels | F - Changes in Off-Site Transfers for Recycling |
| B - Changes in Estimation Methods | G - Other (specify in comments field B14.2) |
| C - Pollution Prevention Activities | H - No Significant Change (< 10%) or No Change |
| D - Changes in On-Site Treatment | I - Not Applicable (First year reporting this substance) |
| E - Changes in Disposal | |

Table 17

**Summary of Reasons for Changes from 2013 to 2014 for Amount Contained In Product
Flex-N-Gate Howard
Windsor, Ontario**

Compound	CAS No.	2013 Amount Contained In Product (kg/year)	2014 Amount Contained In Product (kg/yr)	Change 2013-2014 (%)	NPRI Code	Amount Contained In Product Description
Manganese (and its compounds)	NA	28,407	28,407	0%	H	No Significant Change
PM10	NA	0	0	0%	H	No Significant Change
PM2.5	NA	0	0	0%	H	No Significant Change

Notes:

NPRI Software Reasons for Change must be selected from the following list for each reportable substance:

- | | |
|-------------------------------------|--|
| A - Changes in Production Levels | F - Changes in Off-Site Transfers for Recycling |
| B - Changes in Estimation Methods | G - Other (specify in comments field B14.2) |
| C - Pollution Prevention Activities | H - No Significant Change (< 10%) or No Change |
| D - Changes in On-Site Treatment | I - Not Applicable (First year reporting this substance) |
| E - Changes in Disposal | |

Table 13

**Summary of Reasons for Changes from 2014 to 2015 for Amount That Enters Process
Flex N Gate Howard
Windsor, Ontario**

Compound	CAS No.	2014 Entered Process (kg/year)	2015 Entered Process (kg/yr)	Change 2014-2015 (%)	NPRI Code	Entered Process Description
Manganese (and its compounds)	NA-09	30,825	34,561	12%	A	Increased usage of Novelis pretreated, lubed Aluminum Metal 6XXX
Copper (and its compounds)	NA-06	-	16,841	-	I	NA - First Year Reporting Substance
PM10	NA-M09	0	0	0%	H	No Significant Change
PM2.5	NA-M10	0	0	0%	H	No Significant Change
Volatile Organic Compounds	NA-M16	-	14,476	-	I	NA - First Year Reporting Substance

NPRI Software Reasons for Change must be selected from the following list for each reportable substance:

- | | |
|-------------------------------------|--|
| A - Changes in Production Levels | F - Changes in Off-Site Transfers for Recycling |
| B - Changes in Estimation Methods | G - Other (specify in comments field B14.2) |
| C - Pollution Prevention Activities | H - No Significant Change (< 10%) or No Change |
| D - Changes in On-Site Treatment | I - Not Applicable (First year reporting this substance) |
| E - Changes in Disposal | |

Table 14

**Summary of Reasons for Changes from 2014 to 2015 for Off-Site Transfers
Flex N Gate Howard
Windsor, Ontario**

Compound	CAS No.	2014 Off-site Transfers (kg/year)	2015 Off-site Transfers (kg/yr)	Change 2014-2015 (%)	NPRI Code	Off-site Transfers Description
Manganese (and its compounds)	NA-09	2,292	12,256	435%	F	Increases in Off-Site Transfers, Update of information for Aluminum Recycling
Copper (and its compounds)	NA-06	-	4,793	-	I	NA - First year reporting substance
PM10	NA-M09	0	0	0%	H	No Significant Change
PM2.5	NA-M10	0	0	0%	H	No Significant Change
Volatile Organic Compounds	NA-M16	-	0	-	I	NA - First Year Reporting Substance

Notes:

NPRI Software Reasons for Change must be selected from the following list for each reportable substance:

- | | |
|-------------------------------------|--|
| A - Changes in Production Levels | F - Changes in Off-Site Transfers for Recycling |
| B - Changes in Estimation Methods | G - Other (specify in comments field B14.2) |
| C - Pollution Prevention Activities | H - No Significant Change (< 10%) or No Change |
| D - Changes in On-Site Treatment | I - Not Applicable (First year reporting this substance) |
| E - Changes in Disposal | |

Table 15

**Summary of Reasons for Changes from 2014 to 2015 for Disposals
Flex N Gate Howard
Windsor, Ontario**

Compound	CAS No.	2014 Disposals (kg/year)	2015 Disposals (kg/yr)	Change 2014-2015 (%)	NPRI Code	Disposals Description
Manganese (and its compounds)	NA-09	0	0	0%	H	No Significant Change
Copper (and its compounds)	NA-06	-	0	-	I	NA - First year reporting substance
PM10	NA	0	0	0%	H	No Significant Change
PM2.5	NA	0	0	0%	H	No Significant Change
Volatile Organic Compounds	NA-M16	-	0	-	I	NA - First Year Reporting Substance

Notes:

NPRI Software Reasons for Change must be selected from the following list for each reportable substance:

- | | |
|-------------------------------------|--|
| A - Changes in Production Levels | F - Changes in Off-Site Transfers for Recycling |
| B - Changes in Estimation Methods | G - Other (specify in comments field B14.2) |
| C - Pollution Prevention Activities | H - No Significant Change (< 10%) or No Change |
| D - Changes in On-Site Treatment | I - Not Applicable (First year reporting this substance) |
| E - Changes in Disposal | |

Table 16

**Summary of Reasons for Changes from 2014 to 2015 for Amounts Created
Flex N Gate Howard
Windsor, Ontario**

Compound	CAS No.	2014 Amount Created (kg/year)	2015 Amount Created (kg/yr)	Change 2014-2015 (%)	NPRI Code	Amount Created Description
Manganese (and its compounds)	NA-09	0	0	0%	H	No Significant Change
Copper (and its compounds)	NA-06	-	0	-	I	NA - First year reporting substance
PM10	NA	7,110	7,110	0%	H	No Significant Change
PM2.5	NA	5,336	5,336	0%	H	No Significant Change
Volatile Organic Compounds	NA-M16	-	0	-	I	NA - First Year Reporting Substance

Notes:

NPRI Software Reasons for Change must be selected from the following list for each reportable substance:

- | | |
|-------------------------------------|--|
| A - Changes in Production Levels | F - Changes in Off-Site Transfers for Recycling |
| B - Changes in Estimation Methods | G - Other (specify in comments field B14.2) |
| C - Pollution Prevention Activities | H - No Significant Change (< 10%) or No Change |
| D - Changes in On-Site Treatment | I - Not Applicable (First year reporting this substance) |
| E - Changes in Disposal | |

Table 17

**Summary of Reasons for Changes from 2014 to 2015 for Amount Contained In Product
Flex N Gate Howard
Windsor, Ontario**

Compound	CAS No.	2014 Amount Contained In Product (kg/year)	2015 Amount Contained In Product (kg/yr)	Change 2014-2015 (%)	NPRI Code	Amount Contained In Product Description
Manganese (and its compounds)	NA-09	28,407	22,305	-21%	F	Changes in Off-Site Transfers, Update of Information for Aluminum Recycling
Copper (and its compounds)	NA-06	-	12,049	-	I	NA - First year reporting substance
PM10	NA	0	0	0%	H	No Significant Change
PM2.5	NA	0	0	0%	H	No Significant Change
Volatile Organic Compounds	NA-M16	-	0	-	I	NA - First Year Reporting Substance

Notes:

NPRI Software Reasons for Change must be selected from the following list for each reportable substance:

- | | |
|-------------------------------------|--|
| A - Changes in Production Levels | F - Changes in Off-Site Transfers for Recycling |
| B - Changes in Estimation Methods | G - Other (specify in comments field B14.2) |
| C - Pollution Prevention Activities | H - No Significant Change (< 10%) or No Change |
| D - Changes in On-Site Treatment | I - Not Applicable (First year reporting this substance) |
| E - Changes in Disposal | |

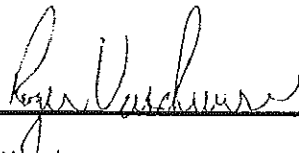
TABLE 18

Toxics Reduction Act Report Copy of Annual Certification
Flex-N-Gate Howard
Windsor, Ontario

Certification - Subsection 26 (3)

As of June 1, 2016, I, Roger Verscheure, certify that I have read the report on the toxic substance reduction plan for the toxic substance referred to below and am familiar with its contents, and to my knowledge the information contained in the report is factually accurate and the report complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under the Act.

Manganese (and its compounds)
PM10
PM2.5



Roger Verscheure
General Manager