Toxics Reduction Act – Public Summary Report – 2014 Reporting Year

Ford Windsor Engine Plant

A. FACILITY INFORMATION

The Windsor Engine Plant machines and assembles engine components to produce complete automotive engine assemblies, including the 5.4L V8 and the 6.8L V10 engines. The main facility processes consist of machining and assembly.

Address	1000 Henry Ford Center Drive Windsor, Ontario N9A 7E8
Spatial Coordinates	335503 m E, 4687508 m N
NPRI/MOECC IDs	NPRI = 4781 MOECC = 6401
No. of Employees	593
Primary Operation	Engine Machining and Assembly Plant
NAICS Code	33 – Manufacturing 3363 – Motor Vehicle Parts Manufacturing 336310 – Motor Vehicle Gasoline Engine and Engine Parts Manufacturing
Facility Contact	Mr. Robert Niemi Ford Motor Company Environmental Quality Office 290 Town Center Drive Suite 800 Dearborn, Michigan 49126 Phone: (313) 206-8034 Email: rniemi1@ford.com
Parent Company	Ford Motor Company of Canada Limited 100 The Canadian Road Oakville, Ontario L6J 5E4

B. TOXIC SUBSTANCE ACCOUNTING

Substances Reported	CAS#	Primary Use/Source
NPRI Part 1 Substances		
Copper (and its compounds)	n/a	Machining/assembly
Manganese (and its compounds)	n/a	Machining/assembly
Nickel (and its compounds)	n/a	Machining/assembly
Lead (and its compounds)	n/a	Machining/assembly
NPRI Part 4 Substances		
Particulate Matter ≤ 10 micron (PM10)	n/a	Machining/assembly/fuel combustion/cooling towers
Particulate Matter ≤ 2.5 micron (PM2.5)	n/a	Machining/assembly/fuel combustion/cooling towers
NPRI Part 5 Substances		
Hydrotreated Light Distillate (Petroleum)	64742-47-8	Rust preventative/machining

Accounting Details

Substance/Category	Accounting Quantities				Reason for Change
	2013	2014	Annual Comparison		
	(tonne)	(tonne)	(tonne)	(%)	
Copper (and its compounds)					
Used	715.2	630.4	84.8	↓12%	Decreased production.
Created	0	0	0.0	0%	n/a
Contained in Product	672.1	590.1	82.0	↓12%	Decreased production.
Released to Air	0.122	0.106	0.016	↓13%	Decreased production.
Released to Water	0	0	0.0	0%	n/a
Transfer for Disposal	0.070	0.041	0.029	↓41%	Decreased quantity of filter material sent for disposal.
Transfer for Recycle	79.050	76.099	2.951	↓4%	n/a

Substance/Category	Accounting Quantities				Reason for Change
	2013	2014	Annual Comparison		
	(tonne)	(tonne)	(tonne)	(%)	
Manganese (and its compounds)					
Used	423.2	365.4	57.8	↓14%	Decreased production.
Created	0	0	0.0	0%	n/a
Contained in Product	341.7	298.6	43.1	↓13%	Decreased production.
Released to Air	0.020	0.017	0.003	↓15%	Decreased production.
Released to Water	0	0	0.0	0%	n/a
Transfer for Disposal	0.036	0.028	0.008	↓22%	Decreased quantity of filter material sent for disposal.
Transfer for Recycle	97.001	84.077	12.924	↓13%	Decreased production.resulted in decreased transfers.
Nickel (and its compounds)					
Used	98.5	86.0	12.5	↓13%	Decreased production.
Created	0	0	0.0	0%	n/a
Contained in Product	89.9	78.9	11.0	↓12%	Decreased production.
Released to Air	0.010	0.009	0.001	↓10%	n/a
Released to Water	0	0	0.0	0%	n/a
Transfer for Disposal	0.007	0.004	0.003	↓43%	Decreased quantity of filter material sent for disposal.
Transfer for Recycle	12.088	11.011	1.077	↓9%	Decreased production.resulted in decreased transfers.
Lead (and its compounds)					
Used	27.8	24.4	3.4	↓12%	Decreased production.
Created	0	0	0.0	0%	n/a
Contained in Product	26.4	23.1	3.3	↓13%	Decreased production.
Released to Air (kg)	0.920	0.800	0.120	↓13%	Decreased production.
Released to Water (kg)	0	0	0.0	0%	n/a
Transfer for Disposal (kg)	4.4	2.83	1.57	↓36%	Decreased quantity of filter material sent for

Substance/Category	Accounting Quantities				Reason for Change
	2013	2014	Annual Comparison		
	(tonne)	(tonne)	(tonne)	(%)	
					disposal.
Transfer for Recycle (kg)	2,913	2,851	62	↓2%	n/a
Particulate Matter ≤ 10 micron (PM10)					
Used	0	0	n/a	n/a	n/a
Created	128.3	111.5	16.8	↓13%	Decreased production.
Released to Air	6.581	5.764	0.817	↓12%	Decreased production.
Particulate Matter ≤ 2.5 micron (PM2.5)					
Used	0	0	n/a	n/a	n/a
Created	64.1	55.7	8.4	↓13%	Decreased production.
Released to Air	6.434	5.596	0.838	↓13%	Decreased production.
Hydrotreated Light Distillate (Petroleum)					
Used	3.14	30.3	27.2	↑>100%	Increased product usage.
Created	0	0	n/a	n/a	n/a
Released to Air	3.14	4.44	1.3	↑41%	Increased product usage.

C. TOXIC SUBSTANCE REDUCTION PLANNING

Objectives & Targets

Substance	Objectives & Targets	Reduction Option Progress
Copper (and its compounds)	Reduce the use of Copper (and its compounds) by implementing improved operating procedures and training efforts with a goal of improving department specific first time through numbers.	In 2014, production at the WEP decreased by approximately 17%, resulting in decreased use of metal components. First time through numbers improved (increased) by 0.3%. All team leaders and process coaches participated in the Ford Production System (FPS) training which included a review of all FPS elements (safety, quality, delivery, cost, people, maintenance and environment).
Manganese (and its compounds)	Reduce the use of Manganese (and its compounds) by implementing improved operating procedures and training efforts with a goal of improving department specific first time through numbers.	
Nickel (and its compounds)	Reduce the use of Nickel (and its compounds) by implementing improved operating procedures and training efforts with a goal of improving department specific first time through numbers.	
Lead (and its compounds)	Reduce the use of Lead (and its compounds) by implementing improved operating procedures and training efforts with a goal of improving department specific first time through numbers.	
Particulate Matter ≤ 10 micron (PM10)	Reduce the creation of Particulate Matter ≤ 10 micron by implementing improved operating procedures and training efforts with a goal of improving department specific first time through numbers.	See above.
Particulate Matter ≤ 2.5 micron (PM2.5)	Reduce the creation of Particulate Matter ≤ 2.5 micron by implementing improved operating procedures and training efforts with a goal of improving department specific first time through numbers.	See above.
Hydrotreated Light Distillate (Petroleum)	Reduce the use of Hydrotreated Light Distillate (HLD) by substituting the current product used, to one that contains less to no HLD.	In 2014, WEP reduced the usage of rust inhibitor containing HLD. Despite that reduced usage, a new product formulation for a coolant used at the site changed, resulting in an increased usage of HLD for 2014.

Annual Report Certification Statement

As of May 31, 2015, I certify that I have read the report(s) on the toxic substance reduction plan(s) for the toxic substances included above, and am familiar with its/their contents and to my knowledge the information contained in the report(s) is factually accurate and the report complies/reports comply with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under the Act.

Shaun Whitehead, Site Operations Manager

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