Toxics Reduction Act – Public Summary Report – 2018 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/MECP IDs	NPRI = 4781 MECP = 6401
No. of Employees	786
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. Cary Holt Ford Motor Company Environmental Quality Office 290 Town Center Drive Suite 800 Dearborn, Michigan 48126 Phone: (313) 938-6055 Email: cholt2@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	Machining coolant

Accounting Details

Substance/Category	Accounting Quantities				Reason for Change
	2017	2018	Annual Comparison		
	(tonne)	(tonne)	(tonne)	(%)	
Copper (and its compounds)					
Used	513.4	645.4	132.0	↑26%	Increase in production levels.
Created	0	0	0.0	0%	n/a
Contained in Product	477.9	604.0	126.1	↑26%	Increase in production levels.
Released to Air	0.077	0.105	0.028	↑36%	Increase in production levels.
Released to Water	0	0	0.0	0%	n/a
Transfer for Disposal	0.0057	0.0070	0.0013	↑23%	Increased volume of OWTP discharge.
Transfer for Recycle	63.344	70.656	7.312	↑12%	Increase in production levels.

Substance/Category	Accounting Quantities				Reason for Change
	2017	2018	Annual Comparison		
	(tonne)	(tonne)	(tonne)	(%)	
Manganese (and its compounds)					
Used	237.6	306.4	68.8	↑29%	Increase in production levels.
Created	0	0	0.0	0%	n/a
Contained in Product	193.3	250.3	57.0	↑29%	Increase in production levels.
Released to Air	0.013	0.015	0.002	↑15%	Increase in production levels.
Released to Water	0	0	0.0	0%	n/a
Transfer for Disposal	0.019	0.022	0.003	↑16%	Increased volume of OWTP discharge.
Transfer for Recycle	61.490	65.008	3.518	↑6%	No significant change.
Nickel (and its compounds)					
Used	64.5	80.6	16.1	↑25%	Increase in production levels.
Created	0	0	0.0	0%	n/a
Contained in Product	59.2	74.3	15.1	↑25%	Increase in production levels.
Released to Air	0.0066	0.0088	0.0022	↑33%	Decrease in production levels.
Released to Water	0	0	0.0	0%	n/a
Transfer for Disposal	0.0006	0.0008	0.0002	↑33%	Increased volume of OWTP discharge.
Transfer for Recycle	8.662	9.585	0.923	↑11%	Increase in production levels.
Lead (and its compounds)					
Used	20.4	25.5	5.1	↑25%	Increase in production levels.
Created	0	0	0.0	0%	n/a
Contained in Product	19.0	24.0	5.0	↑26%	Increase in production levels.
Released to Air (kg)	0.583	0.656	0.073	↑12%	Increase in production levels.
Released to Water (kg)	0	0	0.0	0%	n/a
Transfer for Disposal (kg)	1.01	1.16	0.15	↑15%	Increased volume of OWTP discharge.
Transfer for Recycle (kg)	2,396	2,695	299	↑12%	Increase in production levels.

Substance/Category	Accounting Quantities				Reason for Change
	2017	2018	Annual Comparison		
	(tonne)	(tonne)	(tonne)	(%)	
Particulate Matter ≤ 10 micron (PM10)					
Used	0	0	n/a	n/a	n/a
Created	81.7	100.0	18.3	↑22%	Increase in production levels.
Released to Air	4.310	5.190	0.88	↑20%	Increase in production levels.
Particulate Matter ≤ 2.5 micron (PM2.5)					
Used	0	0	n/a	n/a	n/a
Created	40.8	49.9	9.1	↑22%	Increase in production levels.
Released to Air	4.132	5.048	0.916	↑22%	Increase in production levels.
Hydrotreated Light Distillate (Petroleum)					
Used	44.0	44.5	0.5	↑1%	No significant change.
Created	0	0	n/a	n/a	n/a
Released to Air	4.460	4.494	0.034	↑1%	No significant change.

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.	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.	No alternate products containing less HLD were used in 2018.

Annual Report Certification Statement

As of May 31, 2019, 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.

Tony Savoni, Site Operations Manager

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