



## Toxics Reduction Act – Public Summary Report – 2015 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.

<b>Address</b>	1000 Henry Ford Center Drive Windsor, Ontario N9A 7E8
<b>Spatial Coordinates</b>	335503 m E, 4687508 m N
<b>NPRI/MOECC IDs</b>	NPRI = 4781 MOECC = 6401
<b>No. of Employees</b>	593
<b>Primary Operation</b>	Engine Machining and Assembly Plant
<b>NAICS Code</b>	33 – Manufacturing 3363 – Motor Vehicle Parts Manufacturing 336310 – Motor Vehicle Gasoline Engine and Engine Parts Manufacturing
<b>Facility Contact</b>	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
<b>Parent Company</b>	Ford Motor Company of Canada Limited 100 The Canadian Road Oakville, Ontario L6J 5E4



## B. TOXIC SUBSTANCE ACCOUNTING

Substances Reported	CAS#	Primary Use/Source
<i>NPRI Part 1 Substances</i>		
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
<i>NPRI Part 4 Substances</i>		
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
<i>NPRI Part 5 Substances</i>		
Hydrotreated Light Distillate (Petroleum)	64742-47-8	Rust preventative/machining coolant

### Accounting Details

Substance/Category	Accounting Quantities				Reason for Change
	2014	2015	Annual Comparison		
	(tonne)	(tonne)	(tonne)	(%)	
<b>Copper (and its compounds)</b>					
Used	630.4	680.2	49.8	↑8%	n/a
Created	0	0	0.0	0%	n/a
Contained in Product	590.1	640.0	49.9	↑8%	n/a
Released to Air	0.106	0.099	0.007	↓7%	n/a
Released to Water	0	0	0.0	0%	n/a
Transfer for Disposal	0.041	0.008	0.033	↓80%	Process filter material no longer sent for disposal in 2015.
Transfer for Recycle	76.099	71.215	4.884	↓6%	n/a



Substance/Category	Accounting Quantities				Reason for Change
	2014	2015	Annual Comparison		
	(tonne)	(tonne)	(tonne)	(%)	
<b>Manganese (and its compounds)</b>					
Used	365.4	313.2	52.2	↓14%	Decreased production.
Created	0	0	0.0	0%	n/a
Contained in Product	298.6	258.9	39.7	↓13%	Decreased production.
Released to Air	0.017	0.016	0.001	↓6%	n/a
Released to Water	0	0	0.0	0%	n/a
Transfer for Disposal	0.028	0.026	0.002	↓7%	n/a
Transfer for Recycle	84.077	68.674	15.403	↓18%	Decreased production.resulted in reduced off-site transfers for recycle.
<b>Nickel (and its compounds)</b>					
Used	86.0	83.2	2.8	↓3%	n/a
Created	0	0	0.0	0%	n/a
Contained in Product	78.9	76.5	2.4	↓3%	Decreased production.
Released to Air	0.009	0.0085	0.0005	↓6%	n/a
Released to Water	0	0	0.0	0%	n/a
Transfer for Disposal	0.004	0.0009	0.0031	↓77%	Process filter material no longer sent for disposal in 2015.
Transfer for Recycle	11.011	9.985	1.026	↓9%	n/a
<b>Lead (and its compounds)</b>					
Used	24.4	27.3	2.9	↑12%	Increased production of parts containing a higher lead composition.
Created	0	0	0.0	0%	n/a
Contained in Product	23.1	25.9	2.8	↑12%	Increased production of parts containing a higher lead composition.
Released to Air (kg)	0.800	0.749	0.051	↓6%	n/a
Released to Water (kg)	0	0	0.0	0%	n/a
Transfer for Disposal (kg)	2.83	1.46	1.37	↓48%	Process filter material no longer sent for disposal in 2015.



Substance/Category	Accounting Quantities				Reason for Change
	2014	2015	Annual Comparison		
	(tonne)	(tonne)	(tonne)	(%)	
Transfer for Recycle (kg)	2,851	2,715	136	↓5%	n/a
<b>Particulate Matter ≤ 10 micron (PM10)</b>					
Used	0	0	n/a	n/a	n/a
Created	111.5	105.3	6.2	↓6%	n/a
Released to Air	5.764	5.479	0.285	↓5%	n/a
<b>Particulate Matter ≤ 2.5 micron (PM2.5)</b>					
Used	0	0	n/a	n/a	n/a
Created	55.7	52.6	3.1	↓6%	n/a
Released to Air	5.596	5.310	0.286	↓5%	n/a
<b>Hydrotreated Light Distillate (Petroleum)</b>					
Used	30.3	47.1	16.8	↑55%	Increased product (machining coolant) usage.
Created	0	0	n/a	n/a	n/a
Released to Air	4.44	4.77	0.33	↑7%	n/a



## 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.	<p>In 2015, production at the WEP decreased by approximately 29%, 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).</p>
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 $\leq$ 10 micron (PM10)	Reduce the creation of Particulate Matter $\leq$ 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 $\leq$ 2.5 micron (PM2.5)	Reduce the creation of Particulate Matter $\leq$ 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 April of 2015, WEP switched to a new rust inhibitor, to reduce the use of HLD.



**Annual Report Certification Statement**

As of May 31, 2016, 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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