

**PLAN SUMMARY**  
**VEHCOM MANUFACTURING A DIVISION OF LINAMAR HOLDINGS**  
**GUELPH, ONTARIO**

|  |  |  |
|--|--|--|
| <b>Name &amp; CAS # of Substance</b><br><b>Substances for which other plans have been prepared</b> | Manganese  | 7439-96-5                              |
|  | Copper   | 7440-50-8                              |
|  | Chromium   | 7440-47-3                              |
| <b>Facility Identification and Site Address</b>  |  |  |
| <b>Company Name</b>  | Linamar Holdings Inc.  |  |
| <b>Facility Name</b>   | Vehcom Manufacturing a Division of Linamar Holdings Inc.                   |  |
| <b>Facility Address</b>  | <b>Physical Address:</b>   | <b>Mailing Address: (if different)</b> |
|  | 74 Campbell Road<br>Guelph, Ontario<br>N1H 1C1                             |  |
| <b>Spatial Coordination of Facility</b>  | Easting: 557466.74<br>Northing: 4822105.87                                 |  |
| <b>Number of Employees</b>   | 400  |  |
| <b>NPRI ID</b>   | 7060   |  |
| <b>Ontario MOE ID Number</b>   |  |  |
| <b>Parent Company (PC) Information</b>   |  |  |
| <b>PC Name &amp; Address</b>   | Linamar Corporation, 287 Speedvale Avenue West,<br>Guelph, Ontario N1H 1C5 |  |
| <b>Percent Ownership for each PC</b>   | 100%   |  |
| <b>Business Number for PC</b>  | 103333662  |  |
| <b>Primary North American Industrial Classification System Code (NAICS)</b>                        |  |  |
| <b>2 Digit NAICS Code</b>  | 33 Manufacturing   |  |
| <b>4 Digit NAICS Code</b>  | 3361 - Motor Vehicle Manufacturing   |  |
| <b>6 Digit NAICS Code</b>  | 336110 - Automobile and light-duty motor vehicle manufacturing             |  |
| <b>Company Contact Information</b>   |  |  |
| <b>Facility Public Contact</b>   | Mr. Thomas Horvat, General Manager   |  |
|  | Thomas.Horvat@linamar.com  |  |
|  | Phone: (519) 821-1650  | Same address as facility               |
|  | Fax: (519) 821-9774  |  |

## PLAN SUMMARY STATEMENT

This plan summary reflects the content of the toxic substance reduction plan for Vehcom Manufacturing a Division of Linamar Holdings Inc. for Manganese, prepared by Conestoga-Rovers & Associates.

## STATEMENT OF INTENT

Vehcom Manufacturing a Division of Linamar Holdings Inc. (Vehcom) is committed to playing a leadership role in protecting the environment. Whenever feasible, we will reduce the use and releases of Manganese in compliance with all Federal and Provincial Regulations.

## REDUCTION OBJECTIVES

Vehcom prides itself on technological innovation in order to produce high quality automotive parts in an environmentally responsible manner. Through this plan, Vehcom determine the technical and economic feasibility of each option to determine which, if any, are viable for implementation at this time.

## REDUCTION OPTIONS TO BE IMPLEMENTED

The following options have been identified for implementation to reduce the use and/or amount of Manganese transferred:

- Work with suppliers to reduce foundry defects received
- Reduce the size and weight of the parts 6F Mid and F150
- Implement training practices/procedures amongst machine operators to reduce scrap materials

### **Work with suppliers to reduce foundry defects received**

This option is an on-going procedure at Vehcom, with annual reduction targets that will change from year to year. The schedule for this reduction option is given below:

| <i>Step</i> | <i>Description</i>                                    | <i>Estimated Timelines</i> |
|-------------|---|----------------------------|
| 1           | Discussions with Foundry Suppliers                    | January 2013 - Ongoing     |
| 2           | Implement improvements to inventory management system | January 2013- Ongoing      |
| 3           | Timeline for implementation of Manganese Reductions   | End of 2014                |

**Reduce the size and weight of the parts 6FMid and F150**

The implementation schedule of this option is given below:

| <i>Step</i> | <i>Description</i>                                       | <i>Estimated Timelines</i> |
|-------------|--|----------------------------|
| 1           | Product redesign to account for reduction                | July-December 2013         |
| 2           | Product Testing  |                            |
| 3           | Redesigned materials begin production                    | January 2014               |
| 4           | Timeline for full implementation of Manganese Reductions | End of 2014                |

**Implement training practices/procedures amongst machine operators to reduce scrap materials**

This option is an on-going procedure at Vehcom, with annual reduction targets that will change from year to year. The schedule for this reduction option is given below:

| <i>Step</i> | <i>Description</i>   | <i>Estimated Timelines</i> |
|-------------|--|----------------------------|
| 1           | Review scrap procedures and identify improvement opportunities | January 2013 - Ongoing     |
| 2           | Provide Training Sessions to Operators on handling scrap       | Annually                   |
| 3           | Timeline for implementation of Manganese Reductions            | End of 2014                |

Vehcom has carefully reviewed the toxic substance use reduction options to ensure that there is no net negative impact to the environment or public health. The selected options will serve to reduce the amount of Manganese used in the process, and will not create any toxic by-products.

**CERTIFICATION BY HIGHEST RANKING EMPLOYEE**

As of December 18, 2012, I, Thomas Horvat, certify that I have read the toxic substance reduction plan for the toxic substance 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




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Thomas Horvat  
General Manager  
Vehcom Manufacturing a Division of Linamar Holdings Inc.

**CERTIFICATION BY LICENSED PLANNER**

As of December 18, 2012, I, Dana Lauder, certify that I am familiar with the processes at Vehcom that use or create the toxic substance 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 April 8, 2016 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Manganese



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Dana Lauder  
Conestoga-Rovers & Associates  
Planner License #TSRP00014  
dlauder@croworld.com

**PLAN SUMMARY**  
**Vehcom Manufacturing a Division of Linamar Holdings**  
**GUELPH, ONTARIO**

|  |  |  |
|--|--|--|
| <b>Name &amp; CAS # of Substance</b><br><b>Substances for which other plans have been prepared</b> | Copper   | 7440-50-8                              |
|  | Chromium   | 7440-47-3                              |
|  | Manganese  | 7439-96-5                              |
| <b>Facility Identification and Site Address</b>  |  |  |
| <b>Company Name</b>  | Linamar Holdings Inc.  |  |
| <b>Facility Name</b>   | Vehcom Manufacturing a Division of Linamar Holdings Inc.                   |  |
| <b>Facility Address</b>  | <b>Physical Address:</b>   | <b>Mailing Address: (if different)</b> |
|  | 74 Campbell Road<br>Guelph, Ontario<br>N1H 1C1                             |  |
| <b>Spatial Coordination of Facility</b>  | Easting: 557466.74<br>Northing: 4822105.87                                 |  |
| <b>Number of Employees</b>   | 400  |  |
| <b>NPRI ID</b>   | 7060   |  |
| <b>Ontario MOE ID Number</b>   |  |  |
| <b>Parent Company (PC) Information</b>   |  |  |
| <b>PC Name &amp; Address</b>   | Linamar Corporation, 287 Speedvale Avenue West,<br>Guelph, Ontario N1H 1C5 |  |
| <b>Percent Ownership for each PC</b>   | 100%   |  |
| <b>Business Number for PC</b>  | 103333662  |  |
| <b>Primary North American Industrial Classification System Code (NAICS)</b>                        |  |  |
| <b>2 Digit NAICS Code</b>  | 33 Manufacturing   |  |
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| <b>6 Digit NAICS Code</b>  | 336110 - Automobile and light-duty motor vehicle manufacturing             |  |
| <b>Company Contact Information</b>   |  |  |
| <b>Facility Public Contact</b>   | Mr. Thomas Horvat, General Manager   |  |
|  | Thomas.Horvat@linamar.com  |  |
|  | Phone: (519) 821-1650  | Same address as facility               |
|  | Fax: (519) 821-9774  |  |

## PLAN SUMMARY STATEMENT

This plan summary reflects the content of the toxic substance reduction plan for Vehcom Manufacturing a Division of Linamar Holdings Inc. for Copper, prepared by Conestoga-Rovers & Associates.

## STATEMENT OF INTENT

Vehcom Manufacturing a Division of Linamar Holdings Inc. (Vehcom) is committed to playing a leadership role in protecting the environment. Whenever feasible, we will reduce the use of Copper in compliance with all Federal and Provincial Regulations.

## REDUCTION OBJECTIVES

Vehcom prides itself on technological innovation in order to produce high quality automotive parts in an environmentally responsible manner. Through this plan, Vehcom determine the technical and economic feasibility of each option to determine which, if any, are viable for implementation at this time.

## REDUCTION OPTIONS TO BE IMPLEMENTED

The following options have been identified for implementation to reduce the use and/or amount of Copper transferred:

- Work with suppliers to reduce foundry defects received
- Reduce the size and weight of the parts 6F Mid and F150
- Implement training practices/procedures amongst machine operators to reduce scrap materials

### **Work with suppliers to reduce foundry defects received**

This option is an on-going procedure at Vehcom, with annual reduction targets that will change from year to year. The schedule for this reduction option is given below:

| Step | Description   | Estimated Timelines    |
|------|---|------------------------|
| 1    | Discussions with Foundry Suppliers                    | January 2013 - Ongoing |
| 2    | Implement improvements to inventory management system | January 2013- Ongoing  |
| 3    | Timeline for implementation of Copper Reductions      | End of 2014            |

### **Reduce the size and weight of the parts 6FMid and F150**

The implementation schedule of this option is given below:

| Step | Description   | Estimated Timelines |
|------|---|---------------------|
| 1    | Product redesign to account for reduction             | July-December 2013  |
| 2    | Product Testing                                       |                     |
| 3    | Redesigned materials begin production                 | January 2014        |
| 4    | Timeline for full implementation of Copper Reductions | End of 2014         |

### **Implement training practices/procedures amongst machine operators to reduce scrap materials**

This option is an on-going procedure at Vehcom, with annual reduction targets that will change from year to year. The schedule for this reduction option is given below:

| Step | Description  | Estimated Timelines    |
|------|--|------------------------|
| 1    | Review scrap procedures and identify improvement opportunities | January 2013 - Ongoing |
| 2    | Provide Training Sessions to Operators on handling scrap       | Annually               |
| 3    | Timeline for implementation of Copper Reductions               | End of 2014            |

Vehcom has carefully reviewed the toxic substance use reduction options to ensure that there is no net negative impact to the environment or public health. The selected options will serve to reduce the amount of Copper used in the process, and will not create any toxic by-products.

**CERTIFICATION BY HIGHEST RANKING EMPLOYEE**

As of December 18, 2012, I, Thomas Horvat, certify that I have read the toxic substance reduction plan for the toxic substance 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.

Copper



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Thomas Horvat  
General Manager  
Vehcom Manufacturing a Division of Linamar Holdings Inc.

**CERTIFICATION BY LICENSED PLANNER**

As of December 18, 2012, I, Dana Lauder, certify that I am familiar with the processes at Vehcom that use or create the toxic substance 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 April 8, 2016 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Copper



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Dana Lauder  
Conestoga-Rovers & Associates  
Planner License #TSRP00014  
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**VEHCOM MANUFACTURING A DIVISION OF LINAMAR HOLDINGS**  
**GUELPH, ONTARIO**

|  |  |  |
|--|--|--|
| <b>Name &amp; CAS # of Substance</b><br><b>Substances for which other plans have been prepared</b> | Chromium   | 7440-47-3                              |
|  | Copper   | 7440-50-8                              |
|  | Manganese  | 7439-96-5                              |
| <b>Facility Identification and Site Address</b>  |  |  |
| <b>Company Name</b>  | Linamar Holdings Inc.  |  |
| <b>Facility Name</b>   | Vehcom Manufacturing a Division of Linamar Holdings Inc.                   |  |
| <b>Facility Address</b>  | <b>Physical Address:</b>   | <b>Mailing Address: (if different)</b> |
|  | 74 Campbell Road<br>Guelph, Ontario<br>N1H 1C1                             |  |
| <b>Spatial Coordination of Facility</b>  | Easting: 557466.74<br>Northing: 4822105.87                                 |  |
| <b>Number of Employees</b>   | 400  |  |
| <b>NPRI ID</b>   | 7060   |  |
| <b>Ontario MOE ID Number</b>   |  |  |
| <b>Parent Company (PC) Information</b>   |  |  |
| <b>PC Name &amp; Address</b>   | Linamar Corporation, 287 Speedvale Avenue West,<br>Guelph, Ontario N1H 1C5 |  |
| <b>Percent Ownership for each PC</b>   | 100%   |  |
| <b>Business Number for PC</b>  | 103333662  |  |
| <b>Primary North American Industrial Classification System Code (NAICS)</b>                        |  |  |
| <b>2 Digit NAICS Code</b>  | 33 Manufacturing   |  |
| <b>4 Digit NAICS Code</b>  | 3361 - Motor Vehicle Manufacturing   |  |
| <b>6 Digit NAICS Code</b>  | 336110 - Automobile and light-duty motor vehicle manufacturing             |  |
| <b>Company Contact Information</b>   |  |  |
| <b>Facility Public Contact</b>   | Mr. Thomas Horvat, General Manager   |  |
|  | Thomas.Horvat@linamar.com  |  |
|  | Phone: (519) 821-1650  | Same address as facility               |
|  | Fax: (519) 821-9774  |  |

## PLAN SUMMARY STATEMENT

This plan summary reflects the content of the toxic substance reduction plan for Vehcom Manufacturing a Division of Linamar Holdings Inc. for Chromium, prepared by Conestoga-Rovers & Associates.

## STATEMENT OF INTENT

Vehcom Manufacturing a Division of Linamar Holdings Inc. (Vehcom) is committed to playing a leadership role in protecting the environment. Whenever feasible, we will reduce the use of Chromium in compliance with all Federal and Provincial Regulations.

## REDUCTION OBJECTIVES

Vehcom prides itself on technological innovation in order to produce high quality automotive parts in an environmentally responsible manner. Through this plan, Vehcom determine the technical and economic feasibility of each option to determine which, if any, are viable for implementation at this time.

## REDUCTION OPTIONS TO BE IMPLEMENTED

The following options have been identified for implementation to reduce the use and/or amount of Chromium transferred:

- Work with suppliers to reduce foundry defects received
- Implement training practices/procedures amongst machine operators to reduce scrap materials

### **Work with suppliers to reduce foundry defects received.**

This option is an on-going procedure at Vehcom, with annual reduction targets that will change from year to year. The schedule for this reduction option is given below:

| <i>Step</i> | <i>Description</i>                                    | <i>Estimated Timelines</i> |
|-------------|---|----------------------------|
| 1           | Discussions with Foundry Suppliers                    | January 2013 - Ongoing     |
| 2           | Implement improvements to inventory management system | January 2013 - Ongoing     |
| 3           | Timeline for implementation of Chromium Reductions    | End of 2014                |

**Implement training practices/procedures amongst machine operators to reduce scrap materials.**

This option is an on-going procedure at Vehcom, with annual reduction targets that will change from year to year. The schedule for this reduction option is given below:


| <i>Step</i> | <i>Description</i>   | <i>Estimated Timelines</i> |
|-------------|--|----------------------------|
| 1           | Review scrap procedures and identify improvement opportunities | January 2013 - Ongoing     |
| 2           | Provide Training Sessions to Operators on handling scrap       | Annually                   |
| 3           | Timeline for implementation of Chromium Reductions             | End of 2014                |

Vehcom has carefully reviewed the toxic substance use reduction options to ensure that there is no net negative impact to the environment or public health. The selected options will serve to reduce the amount of Chromium used in the process, and will not create any toxic by-products.

**CERTIFICATION BY HIGHEST RANKING EMPLOYEE**

As of December 18, 2012, I, Thomas Horvat, certify that I have read the toxic substance reduction plan for the toxic substance 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.

Chromium




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Thomas Horvat  
General Manager  
Vehcom Manufacturing a Division of Linamar Holdings Inc.

**CERTIFICATION BY LICENSED PLANNER**

As of December 18, 2012, I, Dana Lauder, certify that I am familiar with the processes at Vehcom that use or create the toxic substance 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 April 8, 2016 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Chromium



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Dana Lauder  
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