

## Toxics Reduction Act Public Annual Report Calendar Year 2016

|  |  |
|--|--|
| <p>The legal and trade names of the owner and the operator of the facility, the street address of the facility and, if the mailing address of the facility is different from the street address, the mailing address.(See below)</p> | <div style="border: 1px solid black; padding: 5px;"> Niagara Investment Castings<br/>division of ASAHI Refining<br/>Canada Ltd.<br/>16 Smith Street, St Catharines<br/>ON L2P 3J1 </div> |
| <p>Facility NPRI identification number</p>   | <div style="border: 1px solid black; padding: 5px;">5761</div>   |
| <p>The identification number assigned to the facility by the Ministry of the Environment for the purposes of Ontario Regulation 127/01.</p>  | <div style="border: 1px solid black; padding: 5px;">---</div>  |
| <p>Number of full-time employees</p>   | <div style="border: 1px solid black; padding: 5px;">53</div>   |
| <p>North American Industry Classification System (NAICS) - 2, 4, and 6 digit codes</p>   | <div style="border: 1px solid black; padding: 5px;"> 31 - 33 Manufacturing<br/>3315 - Foundries<br/>331514 - Steel Foundries </div>  |
| <p>If applicable, the name, position and telephone number of the individual who is the contact at the facility for the public:</p>   |  |
| <p>Public Contact (if applicable)</p>  | <div style="border: 1px solid black; padding: 5px;">Keith Neureuther</div>   |
| <p>Title</p>   | <div style="border: 1px solid black; padding: 5px;">Plant Manager</div>  |
| <p>Phone Number</p>  | <div style="border: 1px solid black; padding: 5px;">(905) 682-9258 ext 222</div>   |
| <p>Address of each person below if not the same as the facility</p>  |  |
| <p>Facility Name</p>   | <div style="border: 1px solid black; padding: 5px;">Niagara Investment Castings<br/>division of ASAHI Refining<br/>Canada Ltd.</div>   |
| <p>Address 1</p>   | <div style="border: 1px solid black; padding: 5px;">16 Smith Street</div>  |
| <p>Address 2</p>   | <div style="border: 1px solid black; padding: 5px;"></div>   |
| <p>City</p>  | <div style="border: 1px solid black; padding: 5px;">St. Catharines</div>   |
| <p>Province</p>  | <div style="border: 1px solid black; padding: 5px;">ON</div>   |
| <p>Postal Code</p>   | <div style="border: 1px solid black; padding: 5px;">L2P 3J1</div>  |
| <p>UTM Zone</p>  | <div style="border: 1px solid black; padding: 5px;">17</div>   |
| <p>UTM Easting</p>   | <div style="border: 1px solid black; padding: 5px;">644977</div>   |
| <p>UTM Northing</p>  | <div style="border: 1px solid black; padding: 5px;">6780885</div>  |
| <p>Legal name of Canadian parent company, if your facility is a subsidiary of a Canadian parent company</p>  |  |
| <p>Parent company name</p>   | <div style="border: 1px solid black; padding: 5px;">Niagara Investment Castings<br/>division of ASAHI Refining<br/>Canada Ltd.</div>   |
| <p>Address 1</p>   | <div style="border: 1px solid black; padding: 5px;">16 Smith Street</div>  |
| <p>Address 2</p>   | <div style="border: 1px solid black; padding: 5px;"></div>   |
| <p>City</p>  | <div style="border: 1px solid black; padding: 5px;">St. Catharines</div>   |
| <p>Province</p>  | <div style="border: 1px solid black; padding: 5px;">ON</div>   |
| <p>Postal Code</p>   | <div style="border: 1px solid black; padding: 5px;">L2P 3J1</div>  |
| <p>Percent Ownership</p>   | <div style="border: 1px solid black; padding: 5px;">100%</div>   |

|   |                              |        |
|---|------------------------------|--------|
| Substance:  | Chromium (and its compounds) |        |
| CAS Number:   | NA-04                        |        |
| On a facility-wide basis:   | Amount                       | Units  |
| Amount that entered the facility as the substance itself or as a constituent of another substance:  | > 10 to 100                  | tonnes |
| The amount of substance that was created:   | 0.000                        | tonnes |
| The amount of substance that was contained in product:  | > 10 to 100                  | tonnes |
| On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at <a href="http://www.ec.gc.ca/inrp-npri/default.asp?lang=en">http://www.ec.gc.ca/inrp-npri/default.asp?lang=en</a> |                              |        |

|   |                            |       |
|---|----------------------------|-------|
| Substance:  | Cobalt (and its compounds) |       |
| CAS Number:   | NA-05                      |       |
| On a facility-wide basis:   | Amount                     | Units |
| Amount that entered the facility as the substance itself or as a constituent of another substance:  | > 1,000 to 10,000          | kg    |
| The amount of substance that was created:   | 0.000                      | kg    |
| The amount of substance that was contained in product:  | > 1,000 to 10,000          | kg    |
| On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at <a href="http://www.ec.gc.ca/inrp-npri/default.asp?lang=en">http://www.ec.gc.ca/inrp-npri/default.asp?lang=en</a> |                            |       |

|   |                            |        |
|---|----------------------------|--------|
| Substance:  | Copper (and its compounds) |        |
| CAS Number:   | NA-06                      |        |
| On a facility-wide basis:   | Amount                     | Units  |
| Amount that entered the facility as the substance itself or as a constituent of another substance:  | > 10 to 100                | tonnes |
| The amount of substance that was created:   | 0.000                      | tonnes |
| The amount of substance that was contained in product:  | > 10 to 100                | tonnes |
| On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at <a href="http://www.ec.gc.ca/inrp-npri/default.asp?lang=en">http://www.ec.gc.ca/inrp-npri/default.asp?lang=en</a> |                            |        |

|   |                          |       |
|---|--------------------------|-------|
| Substance:  | Lead (and its compounds) |       |
| CAS Number:   | NA-08                    |       |
| On a facility-wide basis:   | Amount                   | Units |
| Amount that entered the facility as the substance itself or as a constituent of another substance:  | > 1,000 to 10,000        | kg    |
| The amount of substance that was created:   | 0.000                    | kg    |
| The amount of substance that was contained in product:  | > 1,000 to 10,000        | kg    |
| On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at <a href="http://www.ec.gc.ca/inrp-npri/default.asp?lang=en">http://www.ec.gc.ca/inrp-npri/default.asp?lang=en</a> |                          |       |

|   |                            |        |  |
|---|----------------------------|--------|--|
| Substance:  | Nickel (and its compounds) |        |  |
| CAS Number:   | NA-11                      |        |  |
| On a facility-wide basis:   | Amount                     | Units  |  |
| Amount that entered the facility as the substance itself or as a constituent of another substance:  | > 10 to 100                | tonnes |  |
| The amount of substance that was created:   | 0.000                      | tonnes |  |
| The amount of substance that was contained in product:  | > 10 to 100                | tonnes |  |
| On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching\for this facility at <a href="http://www.ec.gc.ca/inrp-npri/default.asp?lang=en">http://www.ec.gc.ca/inrp-npri/default.asp?lang=en</a> |                            |        |  |

|   |  |        |  |
|---|--|--------|--|
| Substance:  | Particulate Matter less than or equal to 10 microns (PM10) |        |  |
| CAS Number:   | NA-M09   |        |  |
| On a facility-wide basis:   | Amount   | Units  |  |
| Amount that entered the facility as the substance itself or as a constituent of another substance:  | 0.000  | tonnes |  |
| The amount of substance that was created:   | > 0 to 1   | tonnes |  |
| The amount of substance that was contained in product:  | 0.000  | tonnes |  |
| On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching\for this facility at <a href="http://www.ec.gc.ca/inrp-npri/default.asp?lang=en">http://www.ec.gc.ca/inrp-npri/default.asp?lang=en</a> |  |        |  |

|   |  |        |  |
|---|--|--------|--|
| Substance:  | Particulate Matter less than or equal to 2.5 microns (PM2.5) |        |  |
| CAS Number:   | NA-M10   |        |  |
| On a facility-wide basis:   | Amount   | Units  |  |
| Amount that entered the facility as the substance itself or as a constituent of another substance:  | 0.000  | tonnes |  |
| The amount of substance that was created:   | > 0 to 1   | tonnes |  |
| The amount of substance that was contained in product:  | 0.000  | tonnes |  |
| On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching\for this facility at <a href="http://www.ec.gc.ca/inrp-npri/default.asp?lang=en">http://www.ec.gc.ca/inrp-npri/default.asp?lang=en</a> |  |        |  |

### Comparison of Annual Reported Amounts

|   |                              |             |             |         |
|---|------------------------------|-------------|-------------|---------|
| Substance:  | Chromium (and its compounds) |             |             |         |
| CAS Number:   | NA-04                        |             |             |         |
| On a facility-wide basis:   | 2015                         | 2015        | Difference  |         |
| Amount that entered the facility as the substance itself or as a constituent of another substance:  | tonnes                       | tonnes      | tonnes      | %       |
|   | > 10 to 100                  | > 10 to 100 | > 10 to 100 | -33.37% |
| The amount of substance that was created:   | 0.000                        | 0.000       | 0.00        | 0%      |
| The amount of substance that was contained in product:  | > 10 to 100                  | > 10 to 100 | > 10 to 100 | -33.41% |
| On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching\for this facility at <a href="http://www.ec.gc.ca/inrp-npri/default.asp?lang=en">http://www.ec.gc.ca/inrp-npri/default.asp?lang=en</a> |                              |             |             |         |

|   |                            |             |            |        |
|---|----------------------------|-------------|------------|--------|
| Substance:  | Copper (and its compounds) |             |            |        |
| CAS Number:   | NA-06                      |             |            |        |
| On a facility-wide basis:   | 2016                       | 2015        | Difference |        |
| Amount that entered the facility as the substance itself or as a constituent of another substance:  | tonnes                     | tonnes      | tonnes     | %      |
| The amount of substance that was created:   | > 10 to 100                | > 10 to 100 | > 1 to 10  | 29.14% |
| The amount of substance that was contained in product:  | 0.000                      | 0.000       | 0.00       | 0%     |
|   | > 10 to 100                | > 10 to 100 | > 1 to 10  | 17.69% |
| On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching\for this facility at <a href="http://www.ec.gc.ca/inrp-npri/default.asp?lang=en">http://www.ec.gc.ca/inrp-npri/default.asp?lang=en</a> |                            |             |            |        |

|   |                          |                   |                |        |
|---|--------------------------|-------------------|----------------|--------|
| Substance:  | Lead (and its compounds) |                   |                |        |
| CAS Number:   | NA-08                    |                   |                |        |
| On a facility-wide basis:   | 2016                     | 2015              | Difference     |        |
| Amount that entered the facility as the substance itself or as a constituent of another substance:  | kg                       | kg                | kg             | %      |
| The amount of substance that was created:   | > 1,000 to 10,000        | > 1,000 to 10,000 | > 100 to 1,000 | 29.68% |
| The amount of substance that was contained in product:  | 0.000                    | 0.000             | 0.00           | 0%     |
|   | > 1,000 to 10,000        | > 1,000 to 10,000 | > 100 to 1,000 | 13.13% |
| On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching\for this facility at <a href="http://www.ec.gc.ca/inrp-npri/default.asp?lang=en">http://www.ec.gc.ca/inrp-npri/default.asp?lang=en</a> |                          |                   |                |        |

|   |                            |             |             |         |
|---|----------------------------|-------------|-------------|---------|
| Substance:  | Nickel (and its compounds) |             |             |         |
| CAS Number:   | NA-11                      |             |             |         |
| On a facility-wide basis:   | 2016                       | 2015        | Difference  |         |
| Amount that entered the facility as the substance itself or as a constituent of another substance:  | tonnes                     | tonnes      | tonnes      | %       |
| The amount of substance that was created:   | > 10 to 100                | > 10 to 100 | > 10 to 100 | -18.60% |
| The amount of substance that was contained in product:  | 0.000                      | 0.000       | 0.00        | 0%      |
|   | > 10 to 100                | > 10 to 100 | > 10 to 100 | -17.70% |
| On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching\for this facility at <a href="http://www.ec.gc.ca/inrp-npri/default.asp?lang=en">http://www.ec.gc.ca/inrp-npri/default.asp?lang=en</a> |                            |             |             |         |

|   |  |          |            |         |
|---|--|----------|------------|---------|
| Substance:  | Particulate Matter less than or equal to 10 microns (PM10) |          |            |         |
| CAS Number:   | NA-M09   |          |            |         |
| On a facility-wide basis:   | 2016   | 2015     | Difference |         |
| Amount that entered the facility as the substance itself or as a constituent of another substance:  | tonnes   | tonnes   | tonnes     | %       |
| The amount of substance that was created:   | 0.000  | 0.000    | 0.000      | 0%      |
| The amount of substance that was contained in product:  | > 0 to 1   | > 0 to 1 | > 0 to 1   | -22.19% |
|   | 0.000  | 0.000    | 0.000      | -0%     |
| On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching\for this facility at <a href="http://www.ec.gc.ca/inrp-npri/default.asp?lang=en">http://www.ec.gc.ca/inrp-npri/default.asp?lang=en</a> |  |          |            |         |

|   |  |          |            |         |
|---|--|----------|------------|---------|
| Substance:  | Particulate Matter less than or equal to 2.5 microns (PM2.5) |          |            |         |
| CAS Number:   | NA-M10   |          |            |         |
| On a facility-wide basis:   | 2016   | 2015     | Difference |         |
| Amount that entered the facility as the substance itself or as a constituent of another substance:  | tonnes   | tonnes   | tonnes     | %       |
| The amount of substance that was created:   | 0.000  | 0.000    | 0.000      | 0%      |
| The amount of substance that was contained in product:  | > 0 to 1   | > 0 to 1 | > 0 to 1   | -22.17% |
|   | 0.000  | 0.000    | 0.000      | -0%     |
| On-site releases from the facility to air, water and land, as well as on and off-site disposal and off-site recycling can be viewed by searching for this facility at <a href="http://www.ec.gc.ca/inrp-npri/default.asp?lang=en">http://www.ec.gc.ca/inrp-npri/default.asp?lang=en</a> |  |          |            |         |

## Annual Progress Report – Calendar 2016

Substances for which toxic substance reduction plans have been prepared:

| Substance Name   | CAS #     | Toxic Reduction Plan Date |
|--|-----------|---------------------------|
| Chromium and its compounds                                   | NA-04     | December 21, 2012         |
| Copper and its compounds                                     | NA-06     | December 21, 2012         |
| Lead and its compounds                                       | NA-08     | December 21, 2012         |
| Nickel and its compounds                                     | NA-11     | December 21, 2012         |
| Aluminum Oxide   | 1344-28-1 | September 17, 2013*       |
| Particulate Matter less than or equal to 10 microns (PM10)   | NA-M09    | September 17, 2013        |
| Particulate Matter less than or equal to 2.5 microns (PM2.5) | NA-M10    | September 17, 2013        |

\* TRA Exit Record for 2013 reporting year (only non-fibrous form used)

Substances for which a toxic substance reduction plan will be prepared by December 31, 2017:

| Substance Name             | CAS # |
|----------------------------|-------|
| Cobalt and its compounds** | NA-05 |

\*\* The reporting thresholds for cobalt (and its compounds) were lowered to 50 kilograms with a 0.1% concentration threshold for quantities that are manufactured, processed or otherwise used, from the original 10-tonne and 1% concentration thresholds.

### Toxic Reduction Progress

The current reporting year saw slight decreases for some substances primarily due to a decrease in the facility's production in 2016 for several materials due to material reformation.

### Plan Implementation Progress

There were no reduction options identified in any of the plans for the above noted substances that were identified as being both technically and economically feasible. No additional actions outside the plans were taken in 2016 to reduce the use and/or creation for any of the reportable substances. No amendments were made to the toxic substances reduction plans in 2016.

# ON MOE TRA - Electronic Certification Statement

## Annual Report Certification Statement

As of 24/04/2017, I, John Pagnotta, certify that I have read the reports on the toxic substance reduction plans for the toxic substances referred to below and am familiar with their contents, and to my knowledge the information contained in the reports is factually accurate and the reports comply with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

## TRA Substance List

CAS RN

Substance Name

NA - 04

Chromium (and its compounds)

NA - 05

Cobalt (and its compounds)

NA - 06

Copper (and its compounds)

NA - 08

Lead (and its compounds)

NA - 11

Nickel (and its compounds)

NA - M09

PM10 - Particulate Matter <= 10 Microns

NA - M10

PM2.5 - Particulate Matter <= 2.5 Microns

## Company Name

Niagara Investment Castings (division of Asahi Refining Canada)

## Highest Ranking Employee

John Pagnotta

Report Submitted by

John Pagnotta

Website address

I, the highest ranking employee, agree with the certification statement(s) above and acknowledge that by checking the box I am electronically signing the statement(s). I also acknowledge that by pressing the 'Submit Report(s)' button I am submitting the facility record(s)/report(s) for the identified facility to the Director under the Toxics Reduction Act, 2009. I also acknowledge that the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 provide the authority to the Director under the Act to make certain information as specified in subsection 27(5) of Ontario Regulation 455/09 available to the public.

## Submitted Report

Period

Submission Date

Facility Name

Province

City

Programs

2016

24/04/2017

Niagara  
Investment  
Castings (division  
of Asahi Refining  
Canada)

Ontario

St. Catharines

NPRI, ON MOE TRA

Note: If there is a change in the contact information for the facility, a change in the owner or operator of the facility, if operations at the facility are terminated, or if information submitted for any previous year was mistaken or inaccurate, please update this information through SWIM or by contacting the National Pollutant Release Inventory directly.