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# Toxics Reduction Plan Summary

**Ethylene Glycol**  
**CAS: 107-68-8**

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**Prepared for:**

Atlas Roofing Corporation-Toronto Facility  
55 Akron Road  
Etobicoke, Ontario  
M8W 1T3

**Prepared by:**

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November 2017

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## **1.0 Introduction**

Atlas Roofing Corporation (Toronto facility) (hereafter "Atlas"), operates a manufacturing facility located at 55 Akron Road in Etobicoke, Ontario (the "Facility"). Atlas manufactures a wide range of high quality PolyIso foam board for the North American market. The PolyIso boards are used on the roof or cladding in residential or commercial buildings. The main application of these boards is for a thermal barrier to reduce the heat transfer of the building to its surrounding environment.

The Facility is required to prepare plans under The Toxics Reduction Act (and O. Reg 455/09); they have to account, report and prepare a plan on the reduction of specific toxic substances.

The facility was previously required to report and prepare plans for four (4) TRA substances:

- Polymeric Diphenylmethane Diisocyanate (PMDI) (CAS# - 9016-87-9)
- Methylenebis (phenylisocyanate) (MDI) (CAS# - 101-68-8)
- Nonylphenol and its Ethoxylates (CAS# - NA-20)
- Pentane (all isomers) (CAS# - NA-35)

As of the 2016 reporting year, the facility is required to report two additional substances: Ethylene Glycol (CAS# - 107-21-1) and particulate matter  $\leq 2.5$  microns (PM2.5) (CAS# - NA-M10).

As per the requirements of the regulation a plan for each substance reported was prepared. This plan was developed to meet the requirements under O. Reg. 455/09 for Ethylene Glycol (CAS# - 107-21-1). A separate plan for PM2.5 (CAS#-NA-M10) was also prepared. In addition to this document, a plan summary will be submitted to the Ontario Ministry of the Environment and Climate Change (MOECC) and posted on the internet for the public to view.

### **1.1. *General Information***

This toxics reduction plan is for Ethylene Glycol (CAS# - 107-21-1). Atlas manufactures a wide range of high quality PolyIso foam board for the North American market. The

PolyIso boards are used on the roof or cladding in residential or commercial buildings. The main application of these boards is for a thermal barrier to reduce the heat transfer of the building to its surrounding environment. In the manufacturing of the PolyIso boards, the Facility utilizes catalysts to boost the reaction of Methylenebis (phenylisocyanate) (MDI) and Polymeric Diphenylmethane Diisocyanate (PMDI) with active hydroxyl groups. One such catalyst is called PEL-CAT 9648 (manufactured by Ele Corporation) and contains Ethylene Glycol, a TRA Part 1a substance.

The toxic substance is contained in this product and is not released to the atmosphere.

**Table 1- General Facility Information**

<b>NPRI Number</b>	005802
<b>O Reg 127/01 Number</b>	7026
<b>Number of Full-Time Employee Equivalents</b>	37
<b>NAICS Code (2 digit)</b>	31-33 - Manufacturing
<b>NAICS Code (4 digit)</b>	3261 Plastic Manufacturing
<b>NAICS Code (6 digit)</b>	326150 Urethane & Miscellaneous Foam Products Manufacturing
<b>UTM Coordinates</b>	17 T 618251.12 m E 4828427.08 m N
<b>Company Legal Name</b>	Atlas Roofing Corporation
<b>Company Trade Name</b>	Atlas Roofing Corporation (Toronto plant)
<b>Parent Company</b>	Atlas Roofing Corporation

1.2. *Plan Contacts*

A list of the individuals involved in the planning process is provided below:

<p><b>Public Contact:</b> Tikran Gharakhanian Plant Manager 55 Akron Road Etobicoke, ON M8W1T3 Tel: (416) 201-8975 Email: <a href="mailto:tghara@atlasroofing.com">tghara@atlasroofing.com</a></p>
<p>Planner TRA Licence #: TSRP0223</p>

2.0 Facility 's Intent, Objectives and Targets

2.1. *Use*

The act requires that a Facility include a statement of intent to reduce the use of the prescribed toxic substance. If the Facility does not provide a statement of intent it must provide a reason why it does not intend or why it is not possible to reduce the use of the toxic substance. In addition to this, the Facility is required to provide a list of objectives.

**Statement of intent:**

The Facility does not have a statement of intent.

**Reason Why the Facility Does Not Have a Statement of Intent:**

The Facility uses catalysts in the chemical reaction used to manufacture PolyIso foam boards. One catalyst contains ethylene glycol. Currently, there is no suitable substitute that could provide similar results. Atlas Roofing Corporation does not intend to reduce ethylene glycol because (i) presently there are no further reduction options possible, (ii)

the use of catalysts are essential for the product manufacturing, and, (iii) it is not technically or economically feasible to reduce it. Atlas Roofing will continue to use this substance in strict accordance with all applicable environmental regulations, and will continue to evaluate opportunities to reduce the use of the toxic substance as an ongoing project.

**Objectives:**

Atlas Roofing Toronto facility has an Environmental Management Plan, which includes procedures for spill handling, leak detection, and pollution prevention. Also, the Atlas Roofing Toronto facility, is implementing the Lean Manufacturing Principles into its operation, and managing the level of raw material inventory to reduce leaks and spills from its facility. The Atlas Roofing Toronto facility, intends to continue to ensure that ethylene glycol is used in a responsible and efficient manner. All employees at the Atlas Roofing Toronto facility will be involved in the reduction plan of toxic substance usage. Toxic substances will be the first priority for reduction. The Facility's goal will be to reduce the usage and release of toxic substance wherever technically and economically feasible.

**Quantity Target:**

No target.

**Target Timeline:**

No timeline.

**Reason Why Toxic Substance is Used at the Facility:**

For on-site use/ processing.

## 2.2. *Creation*

The act requires that a Facility include a statement of intent to reduce the creation of the prescribed toxic substance. If the Facility does not provide a statement of intent it must provide a reason why it does not intend or why it is not possible to reduce the creation of the toxic substance.

### **Statement of Intent:**

The Facility does not have a statement of intent.

### **Reason Why the Facility Does Not Have a Statement of Intent:**

The Facility does not create the subject substance at the Facility; therefore it is not required to provide a statement of intent on the creation of this substance.

### **Objectives:**

Not applicable.

### **Quantity Target:**

Not applicable.

### **Target Timeline:**

Not applicable.

### **Reason Why Toxic Substance is Created at the Facility:**

Not applicable.

### **3.0 Facility Goals**

There are no reasonable substitutions for this toxic substance and many of the reduction options possible have already been implemented in the past. Therefore, there is no implementation plan or timetable.

### **4.0 Facility TRA Plan (info)**

This plan summary is accurate, up to date and reflects the current facility version of the Toxic Reduction Plan.

### **5.0 Signed Certification Statements**

Refer to the attached signed certification on the following page.



**Certification by Highest-Ranking Employee:**

As of November 8<sup>th</sup>, 2017 [date], I, Tikran Gharakhanian, 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 the plan complies with the *Toxics Reduction Act, 2009* and Ontario Regulation 455/09 (General) made under that Act.

**ETHYLENE GLYCOL**

Signed:

A handwritten signature in black ink, appearing to read "Tikran" followed by a stylized flourish.

Tikran Gharakhanian

**Atlas Roofing Corporation-Toronto Facility**

**Certification by Toxic Substance Reduction Planner:**

As of November 8<sup>th</sup>, 2017, I, Franco DiGiovanni, certify that I am familiar with the processes at Atlas Roofing Corporation (Toronto facility) 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 November 8<sup>th</sup>, 2017, and, that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

**ETHYLENE GLYCOL**

Signed:

A handwritten signature in black ink, appearing to read 'DiGiovanni', written in a cursive style.

Franco DiGiovanni  
**Airzone One Ltd.**