

Toxic Substance Plan Statement

Trefilal II has completed a Toxic Substance Reduction Plan for their facility and this plan has examined various options for the reduction in the use of Manganese at the facility. Of the two (2) options developed and assessed in the plan, none were determined to be technically feasible.

Toxic Substance Plan Summary and Certification

Company Name:	Trefilal II	Parent Company:	Air Liquide Canada Inc.
Address:	1430 Tessier Street, Hawkesbury	Address:	1700-125 Rene-Levesque, Montreal, Quebec, H3B5E6
Number of Employees	15	UTM Spatial Coordinates	45.61010 -74.60850
NAICS Code	333990	NPRI ID #	0000002939
		Ontario MOE ID #	NA
Facility Public Contact	Yves Morin		
Position	Plant Manager	Email	yves_Morin@Lincolnelectric.com
Phone #:	(613) 636-0683		
Toxic Substances	CAS#		
Manganese	7439-96-5		

Toxic Reduction Policy Statement of Intent

Manganese (a Phase 1 toxic substance) is currently used by Trefilal II in the welding wire production process. Trefilal II is committed to playing a leadership role in protecting the environment. Wherever feasible, we will eliminate or reduce the use of Manganese in full compliance with all federal and provincial regulations. This facility does not create Manganese; therefore this plan will not address reducing its creation. Toxic substance reduction will be an ongoing effort at Trefilal II and we will continue to monitor technological advancements to ensure that options that are both technologically and economically viable are implemented at our plant where possible.

Reduction Objectives

Trefilal II prides itself on technological innovation in order to produce high quality products in an environmentally responsible manner. Trefilal II will strive to reduce the use of the Phase 1 toxic substance Manganese. This plan will determine the technical and economic feasibility of each option identified to determine which, if any, are viable for implementation at this time.

Description of Substances

Manganese is received at the facility as an alloy in carbon steel wire and is generally present at concentrations ranging from 1.2 to 1.4%. Manganese is not added to the welding wire at the facility, however, is present in the raw wire received at the facility as an alloying agent. Trefilal II used 43,658 Tons of Manganese in the 2016 Calendar year. Manganese is a Phase 1 substance; however, 2016 was the first year in which the Trefilal II facility reported for Manganese. As such, a reduction plan for Manganese was not done previously.

Toxic Substance Reduction Option to be Implemented

Trefilal II has reviewed numerous options to reduce the use of Manganese. After completing a technical feasibility assessment, Trefilal II has found no technically feasible options at this time. It should be noted that a significant process modification consisting of a sulphuric acid and aqueous copper sulphate dosing system was completed in 2015. Installation of this dosing system has resulted in a significant reduction in the use of Manganese in the processes conducted at the plant.

Plan Summary Statement

Trefilal II has completed a Toxic Substance Reduction Plan for their facility and this plan has examined various options for the reduction in the use of Manganese at the facility.

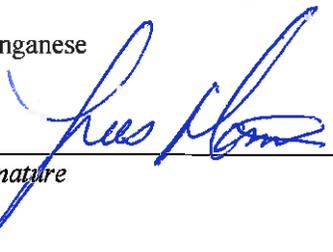
Of the two (2) options developed and assessed in the plan, none were determined to be technically feasible. Trefilal II has decided not to implement any new reduction options at this time.

Certification by Highest Ranking Employee

As of December 20, 2017, I, Yves Morin, certify that I have read the toxic substance reduction plans for the toxic substances referred to below and am familiar with their contents, and to my knowledge the plans are factually accurate and comply with the *Toxics Reduction Act, 2009* and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substances:

Manganese


December 20, 2017
Signature

Certification by Licensed Planner

As of December 20, 2017, I, Stewart McLellan certify that I am familiar with the processes at Trefilal II that use or create the toxic substances 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 toxic substance reduction plans referred to below for the toxic substances and that the plans comply with that Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substances:

Manganese– Plan Dated December 20, 2017


December 20, 2017

Stewart McLellan, C.E.T
Toxic Substance Reduction Planner, TRSP0257
Cardinal Environmental Consulting Services Ltd.