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Toxics Reduction Plan  
Hexavalent Chromium

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Hydrauli – Chrome Inc.

Wissam El Hayek

December 21, 2012

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## **Toxics Reduction Act: Hydraulics – Chrome Inc.**

### **1.0 Introduction**

#### **1.1 General Information**

The facility is located at 1480 Michael Street, Ottawa, Ontario, K1B 4S1. This plan is for hexavalent chromium. There are no other substances.

Table 1-1 General Facility Information

NPRI Number	10182
O Reg 127/01 Number	
Number of full time employee equivalents	17
NAICS Code (2 digit)	33 - Manufacturing
NAICS Code (4 digit)	3328 - Coating, Engraving, Heat Treating and Allied Activities
NAICS Code (6 digit)	332810 - Coating, Engraving, Heat Treating and Allied Activities
UTM Coordinates	18 T 450830.38 m E 5029260.50 m N
Company Legal Name	Hydraulics-Chrome Inc
Company Trade Name	Hydraulics-Chrome Inc

#### **1.2 Plan Contacts:**

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

##### **Public Contact**

Mr. Wissam El Hayek  
1480 Michael Street  
Ottawa, ON  
K1B 4S1  
Tel: 613-744-7671  
Fax: 613-744-7672  
Email: [hydraulics.chrome@rogers.com](mailto:hydraulics.chrome@rogers.com)

## 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.

#### **Summarize why the toxic substance is used at the facility:**

Hexavalent chromium, in the form of chromium trioxide, is used for chromium plating at HCl. Chromium plating (hard or industrial chromium plating) is done from a solution of chromic acid ( $H_2CrO_4$ ) which is made by dissolving chromium trioxide ( $CrO_3$ ) in water ( $H_2O$ ). Both chromium trioxide and chromic acid are "hexavalent chromium compounds" with separate CAS numbers.

#### **Statement of Intent:**

The facility does not have a statement of intent.

#### **Reason why there is no statement of intent:**

Hydrauli-Chrome Inc. does not intend to reduce hexavalent chromium because (i) there are no further reduction options possible, and, (ii) they are in the business of chrome plating and there is not a suitable substitute that could provide a product suitable to clients.

#### **Objectives:**

It is not possible to reduce the use of hexavalent chromium (as chromic acid) because hard chromium plating requires a definite chromic acid concentration of about 250 g/L. (A concentration range exists from 240 - 260 g/L. For optimum plating the concentration is 250g/L).

**Quantity target:** No target

**Target Timeline:** No timeline

**Reason why toxic substance is used at the facility:** (from drop down menu options)

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.

Chromium trioxide and chromic acid are **not "created" as a byproduct in or of a manufacturing process.** Chromium trioxide is purchased and is used to make chromic acid.

### **Statement of intent:**

The facility does not have a statement of intent.

### **Reason why the facility does not have a statement of intent:**

This facility does not create hexavalent chromium, therefore this plan will not address reducing its creation.

**Objectives:** N/A

**Quantity Target:** N/A

**Target Timeline:** N/A

### **Reason why toxic substance is used at the facility:**

This substance is not created at the facility

## 3.0 Facility's Goals

There are no reasonable substitutions for these substances and many of the reduction options possible have already been implemented in the past.

## 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

**Certification by highest ranking employee**

As of December 21, 2012, I, Wissam El Hayek, 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.

**Hexavalent Chromium**

Signed: IN OTTAWA ON THE 21 OF DECEMBER 2012

AT 1480-A MICHAEL ST  
OTTAWA ONTARIO

K1B 4S1  
PHONE: 613 744 7671  
FAX : 613 744 7672  
cell : 613 292 8108

Wissam El Hayek

Hydrauli-Chrome Inc.



## **Certification by toxic substance reduction planner**

As of December 21, 2012, I, Franco DiGiovanni, certify that I am familiar with the processes at Hydraul-Chrome Inc. 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 December 21, 2012 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

### **Hexavalent Chromium**

Signed:

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

Franco DiGiovanni

**Airzone One Ltd.**