

# Annual Quantification Summary - Toxic Reduction Plan for Manganese and Chromium

## Basic Facility Information

<b>ID Numbers</b>	
NPRI ID Number	25448
Business Number	866545486
<b>Facility Identification and Site Address</b>	
Company Name	Global File Inc.
Facility Name	Global File Inc.
Address	7939 Keele St. Concord, Ontario L4K 1Y6
Spatial coordinates of the facility	Latitude: 43.80355 Longitude: -79.50016
UTM coordinates of the facility	UTM Zone: 17 UTM Easting: 620644.99 UTM Northing: 4851147.09
<b>Parent Company</b>	
Company Name	Global Upholstery Co. Inc.
Address	560 Supertest Road, Downsview, ON, M3J 2M6
Business Number	130973217
Percentage of the facility owned by the parent company	80%
<b>Industrial Classifications</b>	
Two-Digit NAICS Code	31-33
Four-Digit NAICS Code	3372
Six-Digit NAICS Code	337214
Total Number of Employees (or equivalent) Per Year (includes students, part-time and term employees):	177
<b>Highest Ranking Employee and Public Contact</b>	
<i>Name</i>	Yosi Shachar
<i>Position/Title</i>	General Manager
Address	7939 Keele St. Concord, Ontario L4K 1Y6
Telephone Number	(905) 761-3284
Fax Number:	(905) 761-3282
E-mail address	yosi@globalfile.ca
<b>Person who coordinated and prepared the plan</b>	
<i>Name</i>	Ernest Itzkovich
<i>Position/Title</i>	Director, Quality Resources
Address	7939 Keele St. Concord, Ontario L4K 1Y6
Telephone Number	(905) 761-3284
Fax Number:	(905) 761-3282
E-mail address	ernest@globalfile.ca

## Statement of Plan Summary

This Toxic Reduction Plan summary accurately reflects the Toxic Substance Reduction Plan dated November 12, 2013 that was prepared by Global File Inc. according to Ontario Regulation 455/09.

### Phase 1 Substances

Global File Inc. is a manufacturer of metal filing and storage products. The substances listed below are above the reportable threshold limits for NPRI and Ontario Regulation 455/09.

***Manganese: No CAS. Number***

(MSDS: 1.65% contained in steel)

***Chromium: No CAS Number***

(MSDS: 1.1% contained in steel)

**Note:** Plan for manganese and chromium are contained in this one document as they are chemical components of steel that we use to manufacture metal filing and storage products.

# Statement of Intent and Objective of the Plan

## MANGANESE

### **Statement of Intent - Manganese**

Global File Inc. is committed to minimizing the environmental impact we have on our planet. Manganese is a chemical contained in the raw material we use here at Global File Inc. We intend to minimize the use of manganese. This facility does not create manganese, therefore this plan does not address reduction of creation.

### **Objective - Manganese**

Global File Inc. is committed to continuous improvement. Our objective is to seek out and implement innovative ideas that decrease our manganese usage. Further, this plan will determine, based on the ideas formulated, to reduce the use of toxic substances whether these ideas are technically and economically feasible.

## CHROMIUM

### **Statement of Intent - Chromium**

Global File Inc. is committed to minimizing the environmental impact we have on our planet. Chromium is a chemical contained in the raw material we use here at Global File Inc. We intend to minimize the use of chromium. This facility does not create chromium, therefore this plan does not address reduction of creation.

### **Objective - Chromium**

Global File Inc. is committed to continuous improvement. Our objective is to seek out and implement innovative ideas that decrease our chromium usage. Further, this plan will determine, based on the ideas formulated, to reduce the use of toxic substances whether these ideas are technically and economically feasible.

# Options To Reduce The Use Of Manganese and Chromium

## 1. Materials or Feedstock Substitution

Reducing the use of Manganese and Chromium through materials or feedstock substitution is not possible because Global File is a steel manufacturer. Steel is the only material Global File can use to build our products.

## 2. Spill and Leak Prevention

Reducing the use of Manganese and Chromium through spill and leak prevention is not possible because Manganese and Chromium is not in a liquid state and is a chemical contained in our steel.

## 3. Training/Improved Operating Practices

Further training and improvements to our “one off” procedure can help Global File reduce the amount of rejected parts we send to recycling. Training can teach employees how to effectively make sure they are building parts to the correct size and improvements to the procedure can help Global File catch mistakes earlier to reduce the amount of rejected parts we send to recycling thus reducing the amount of Manganese and Chromium Global File uses.

**Estimation:** With improvements made to our “one off” we estimate we can reduce the use of Manganese and Chromium by one percent.

**Calculation:** Weight of recycled rejected parts x 0.01 = Estimated reduction of recycled weight.  
Estimated reduction of recycled weight x 0.0165 or 0.011 = Estimated reduction in use of Manganese or Chromium.

$$1,561\text{kg} \times 0.01 = 15.61\text{kg}$$

$$\text{Manganese: } 15.61 \times 0.0165 = 0.26 \text{ kg}$$

$$\text{Chromium: } 15.61 \times 0.011 = 0.17 \text{ kg}$$

**There is an estimated reduction in use of 0.26 kg of Manganese and 0.17 kg of Chromium by implementing this option.**

## 4. Improved Inventory Management or Purchasing Techniques

By consolidating the coil sizes Global File purchases to a smaller width can help reduce the amount of Manganese and Chromium used. Rather than purchase steel coils with large widths

Global File can make it policy to not purchase any steel coils larger than a width number determined by the company.

**Estimation:** Based on calculations we estimate that implementing this option can reduce the amount of Manganese and Chromium we use by twenty three percent

**Calculation:** Coil weight of smallest width divided by average weight of coil = Estimated percentage of reduction

Estimated percentage of reduction x total weight of steel purchased for 2011 = Estimated reduction of steel purchased in weight

Estimated reduction of steel purchased in weight x 0.0165 or 0.011 = Estimated reduction in use of Manganese or Chromium.

454 kg divided by 1,984 kg = 23%

0.23 x 6,032,985 kg = 1,387,586 kg

Manganese: 1,387,586 kg x 0.0165 = 22,895 kg

Chromium: 1,387,586 kg x 0.011 = 15,263 kg

**There is an estimated reduction in use of 22,895 kg of Manganese and 15,263 kg of Chromium by implementing this option.**

## **5. Product Design or Reformulation**

Part consolidation is an option to reduce the use of Manganese and Chromium. Part consolidation would allow Global File to create identical parts for different products. The ability to do this would help Global File to use less coils to create products which in turn means Global File is purchasing less steel and thus reducing the amount of Manganese and Chromium used at Global File.

**Estimation:** Based on discussions with our Engineering department we estimate that this reduction option can reduce the amount of steel purchased in weight by five percent.

**Calculation:** Total steel purchased in 2011 x 0.05 = estimated steel reduction

Estimated steel reduction x 0.0165 or 0.011 = estimated reduction of Manganese or Chromium.

6,032,985 kg x 0.05 = 301,649 kg

Manganese: 301,649 kg x 0.0165 = 4,977 kg

Chromium: 301,649 kg x 0.011 = 3,318 kg

**There is an estimated reduction in use of 4,977 kg of Manganese and 3,318 kg of Chromium by implementing this option.**

## **6. Equipment or Process Modification**

Replacing our current equipment to support the use of steel with a thinner gauge can help reduce the use of Manganese and Chromium. By having equipment that support the use of steel with a thinner gauge Global File can reduce the amount of steel used to produce our products.

**Estimation:** Based on the average change in thickness of steel for all our products we estimate we can reduce the amount of steel used by twelve percent.

**Calculation:** Total steel purchased in 2011 x 0.12 = estimated steel reduction

Estimated steel reduction x 0.0165 or 0.011 = estimated reduction of Manganese or Chromium.

6,032,985 kg x 0.12 = 723,958 kg

Manganese: 723,958 kg x 0.0165 = 11,945 kg

Chromium: 723,958 kg x 0.011 = 7,963 kg

**There is an estimated reduction in use of 11,945 kg of Manganese and 7,963 kg of Chromium by implementing this option.**

## **7. On-site Reuse or Recycling**

Reusing scrap steel from larger parts to create smaller parts is an option that can be implemented to reduce the use of Manganese and Chromium. By reusing scrap steel we reduce the amount of steel Global File sends to waste and also reduces the amount of steel we have to purchase.

**Estimation:** Based on our estimates a full implementation of this option can reduce our steel usage by three percent.

**Calculations:** Total steel purchased in 2011 x 0.03 = estimated steel reduction

Estimated steel reduction x 0.0165 or 0.011 = estimated reduction of Manganese or Chromium

6,032,985 kg x 0.03 = 180,989 kg

Manganese: 180,989 kg x 0.0165 = 2,986 kg

Chromium: 180,989 kg x 0.011 = 1,991 kg

**There is an estimated reduction in off-site recycling of 2,986 kg of manganese and 1,991 kg of Chromium by implementing this option.**

**Summary of Manganese for 2011-2017 reporting year:**

Year	Used (tonnes/yr.)	Created (tonnes/yr.)	Contained in Product (tonnes/yr.)	On-site release (tonnes/yr.)			Disposal (tonnes/yr.)		Off-site recycling (tonnes/yr.)
				Air	Water	Land	On-site	Off-site	
2011 to 2016	>10 to 100	0	>10 to 100	>0 to 1	0	0	0	0	>1 to 10
2017	>10 to 100	0	>10 to 100	>0 to 1	0	0	0	0	>1 to 10


**Summary of Chromium for 2011-2017 reporting year:**

Year	Used (tonnes/yr.)	Created (tonnes/yr.)	Contained in Product (tonnes/yr.)	On-site release (tonnes/yr.)			Disposal (tonnes/yr.)		Off-site recycling (tonnes/yr.)
				Air	Water	Land	On-site	Off-site	
2011 to 2016	>10 to 100	0	>10 to 100	>0 to 1	0	0	0	0	>1 to 10
2017	>10 to 100	0	>10 to 100	>0 to 1	0	0	0	0	>1 to 10

**Certification**

As of May 28, 2018, I, Yosi Shachar, certify that I have read the toxic substance reduction plan dated November 12, 2013 for the toxic substances referred to below and am familiar with its contents and, to my knowledge, this version of the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

Chromium and Manganese

  
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 Yosi Shachar  
 General Manager,  
 Global File Inc.

May 28 2018  
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 Date