

Summary Letter as Required Under Toxics Reduction Act and Ontario Regulation 455/09

Great Lakes Copper Ltd.

1010 Clarke Road London, Ontario N5Y 5S6 **Number of employees**: 356

NPRI ID: 2396

Contact Information:

Contact Name: John Warner

Position: Health & Safety and Environmental Specialist

Phone: (519) 951-3400 **Mobile:** (226) 228-6164

Email: John.Warner@glcopper.com

Geographical Coordinates:

Latitude: 43.0233 Longitude: -81.1842

Datum: 1983

Standard Industrial Classifications:

NAICS 2 Code: 33 - Manufacturing

NAICS 4 Code: 3314 - Non-ferrous metal (except aluminum) production and processing

NAICS 6 Code: 331420 - Copper rolling, drawing, extruding and alloying

Other Environmental Programs:

GHGRP



2020 Substance Information

Substance Name	CAS Number	Units	Amount Entering Process	Amount Created	Amount Released to Air	Amount Disposed	Amount Recycled	Amount Contained in Product
Copper	NA - 06	Tonnes	10,000 to 100,000	N/A	0.129	1.185	110.686	10,000 to 100,000
Selenium	NA - 12	Kilograms	100 to 1,000	N/A	0.371	1.496	N/A	100 to 1,000
PM10	NA - M09	Tonnes	N/A	1 to 10	5.506	N/A	N/A	N/A
PM2.5	NA - M10	Tonnes	N/A	1 to 10	5.506	N/A	N/A	N/A
voc	NA - M16	Tonnes	100 to 1,000	0.1 to 1	14.728	18.106	N/A	N/A
Stoddard Solvent	8052-41-3	Tonnes	100 to 1,000	N/A	13.230	17.385	N/A	N/A

For comparison purposes, the following table provides a summary of the 2019 and 2020 TRA Accounting values.

Substance Name	Units	Year	Amount Entering Process	Amount Created	Amount Released to Air	Amount Disposed	Amount Recycled	Amount Contained in Product
Copper	Tonnes	2019	10,000 to 100,000	N/A	0.154	2.202	165.280	10,000 to 100,000
		2020	10,000 to 100,001	N/A	0.129	1.185	110.686	10,000 to 100,000
		Change	-1,116	N/A	-0.024	-1.017	-54.594	-1,060
			-4%		-16%	-46%	-33%	-4%
		Rationale	Insignificant change (<10%)	N/A	Decrease in furnace operating hours due to less extra shift casting	Decrease in amount of baghouse dust sent to landfill	Decrease in amount of slag sent for recycling	Insignificant change (<10%)
		GLC does not currently have technically or economically feasible reduction options to reduce the use or creation of the toxic substances identified in this plan.						
Selenium	Kilograms	2019	100 to 1,000	N/A	0.441	2.781	0	100 to 1,000
		2020	100 to 1,000	N/A	0.371	1.496	0	100 to 1,000
		Change	-50	N/A	-0.070	-1.284	0	-49
			-33%		-16%	-46%	N/A	-33%
		Rationale	Updated copper chemisrty report for 2020	N/A	Decrease in furnace baghouse operating hours	Decrease in amount of baghouse dust sent to landfill	N/A	Updated copper chemisrty report for 2020
			ot currently have the toxic substan			sible reduction o	otions to reduce	the use or



Substance Name	Units	Year	Amount Entering Process	Amount Created	Amount Released to Air	Amount Disposed	Amount Recycled	Amount Contained in Product
PM ₁₀		2019	N/A	1 to 10	6.631	N/A	N/A	N/A
	Tonnes	2020	N/A	1 to 10	5.506	N/A	N/A	N/A
		Change	N/A	-1.125	-1.125	N/A	N/A	N/A
				-17%	-17%			
		Rationale	N/A	Decrease in furnace baghouse and cooling tower operating hours	Decrease in furnace baghouse and cooling tower operating hours	N/A	N/A	N/A
		GLC does not currently have technically or economically feasible reduction options to reduce the use or creation of the toxic substances identified in this plan.						
PM _{2.5}	Tonnes	2019	N/A	1 to 10	6.631	N/A	N/A	N/A
		2020	N/A	1 to 10	5.506	N/A	N/A	N/A
		Change	N/A	-1.125	-1.125	N/A	N/A	N/A
				-17%	-17%			
		Rationale	N/A	Decrease in furnace baghouse and cooling tower operating hours	Decrease in furnace baghouse and cooling tower operating hours	N/A	N/A	N/A
		GLC does not currently have technically or economically feasible reduction options to reduce the use or creation of the toxic substances identified in this plan.						
	Tonnes	2019	10 to 100	0.1 to 1	14.084	19.76	N/A	N/A
VOCs		2020	10 to 100	0.1 to 2	14.728	18.11	N/A	N/A
		Change	-1.405	-0.010	0.644	-1.65		N/A
			-4%	-2%	5%	-8%	N/A	
		Rationale	Decrease in usage of products containing VOCs	Insignificant change (<10%)	Insignificant change (<10%)	Insignificant change (<10%)	N/A	N/A
				e technically or e		sible reduction op	tions to reduce	the use or



Substance Name	Units	Year	Amount Entering Process	Amount Created	Amount Released to Air	Amount Disposed	Amount Recycled	Amount Contained in Product
Stoddard Solvent	Tonnes	2019	10 to 100	N/A	12.524	18.91	N/A	N/A
		2020	10 to 100	N/A	13.230	17.38	N/A	N/A
		Change	-0.815	NI/A	0.706	-1.52	N/A	N/A
		Change	-3%	N/A	6%	-8%		
		Rationale	Insignificant change (<10%)	N/A	Insignificant change (<10%)	Insignificant change (<10%)	N/A	N/A
			not currently have the toxic substar	-	-	sible reduction op	otions to reduce	e the use or



Certification

As of April 22, 2021, I, Kent Schenk, certify that I have read the report on the toxic substance reduction plan for the toxic substances referred to above and am familiar with its contents, and to my knowledge the information contained in the report is factually accurate and the report complies with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under that Act.

Signed, in London, Ontario, on April 22, 2021

Kent Selenk

Kent Schenk

General Manager

Great Lakes Copper Ltd.