

Toxic Substance Reduction Plan 2016 Public Summary Update

Company Information				Facility Information					
Company Legal Name	CAMECO Corporation	Company Trade Name	CAMECO Corporation	Facility Name	Port Hope Conversion Facility	NPRI ID	000001145	NAICS Code	331410
Mailing and Physical Address	2121 11th Street West, Saskatoon, SK, S7M 1J3			Mailing and Physical Address	1 Eldorado Place, Port Hope, ON L1A3A1			Employees	326
				UTM Coordinates, Zone, Easting, Northing	Zone 17	626400	Eastings (m)	4859420	Northing (m)
				Public Contact Name, Position, and Phone Number	Tina Easto, Senior Environmental Specialist, 905-885-4511				

Substance Information

Plans have been prepared for the following substances: Hydrogen fluoride (7664-39-3), Fluorine (7782-41-4), Nitrogen oxides (11104-93-1), Nitric acid (7697-37-2), Nitrate ion in solution at pH>= 6.0 (NA-17), Ammonia (total) (NA - 16), PM₁₀ (NA - M09) and PM_{2.5} (NA - M10)

Objectives

Hydrogen fluoride/Fluorine	Cameco intends to reduce its hydrogen fluoride (HF) consumption by improving HF recovery and recycling practices where technically and economically feasible. While the current process is already very efficient, further gains may be found by modifying and adjusting the aqueous HF recovery control system and equipment.
Nitrogen oxides	Cameco intends to reduce nitrogen oxide (NOx) creation by considering alternate water treatment options.
Nitric acid	Cameco intends to reduce its nitric acid consumption through distribution control improvements where technically and economically feasible.
Nitrate ion in solution at pH>= 6.0	Cameco's ammonium nitrate creation will be reduced through reduction in consumption of nitric acid and ammonia.
Ammonia (total)	Cameco intends to reduce its ammonia consumption through distribution control improvements where technically and economically feasible.
PM ₁₀ and PM _{2.5}	Cameco strives to reduce the creation of particulate matter (PM ₁₀ and PM _{2.5}) within its operations where technically and economically feasible. Cameco has invested in various pollution control technologies such as bag houses and HEPA filters to reduce particulate emission discharge. Cameco voluntarily conducts third party source testing to continually improve particulate emissions.

2015/2016 Quantification and Comparison

		2016 tonnes	2015 tonnes	Percent change	SWIM Reason for change
Used		1000-10,000	1000-10,000	-25%	Normal production variation
Contained in product	Hydrogen fluoride CAS 7664-39-3	0	0	0%	No significant change
Released		0.31	0.43	-27%	Normal production variation
Transferred		0	0	0%	No significant change
Disposed		0	0	0%	No significant change
Created		1000-10,000	1000-10,000	25%	Normal production variation
Contained in product	Nitric Acid, CAS 7697-37-2	0	0	0%	No significant change
Released		0	0	0%	No significant change
Transferred (Recycled)		0	0	0%	No significant change
Disposed		0	0	0%	No significant change
Created		10-100	10-100	0%	No significant change
Contained in product	Nitrogen Oxides CAS 11104-93-1	0	0	0%	No significant change
Released		47.9	47.9	0%	No significant change
Transferred (Recycled)		0	0	0%	No significant change
Disposed		0	0	0%	No significant change
Created		1000-10,000	1000-10,000	-25%	Normal production variation
Contained in product	Fluorine CAS 7782-41-4	0	0	0%	No significant change
Released		0.01	0.02	-26%	Normal production variation
Transferred (Recycled)		0	0	0%	No significant change
Disposed		0	0	0%	No significant change
Created		100-1000	100-1000	25%	Normal production variation
Contained in product	Nitrate ion in solution at pH>= 6.0 CAS NA-17	100-1000	100-1000	25%	Normal production variation
Released		0	0	0%	No significant change
Transferred (Recycled)		0	0	0%	No significant change
Disposed		0	0	0%	No significant change
Created		100-1000	100-1000	25%	Normal production variation
Contained in product	Ammonia (total) CAS NA - 16	100-1000	100-1000	25%	Normal production variation
Released		44.0	37.4	18%	Normal production variation
Transferred (Recycled)		0	0	0%	No significant change
Disposed		0	0	0%	No significant change
Created		1-10	1-10	4%	No significant change
Contained in product	PM10 CAS NA - M09	0	0	0%	No significant change
Released		4.1	3.9	4%	No significant change
Transferred (Recycled)		0	0	0%	No significant change
Disposed		0	0	0%	No significant change
Created		1-10	1-10	3%	No significant change
Contained in product	PM2.5 CAS NA - M10	0	0	0%	No significant change
Released		4.0	3.9	3%	No significant change
Transferred (Recycled)		0	0	0%	No significant change
Disposed		0	0	0%	No significant change
Created		100-1000	100-1000	25%	Normal production variation

Progress in Implementing the Plan

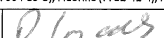
Phase	Contaminant	Estimate of Reductions Achieved	Difference Between Steps Taken and Those in the Plan	Amendments to the Plan
Phase 2	Hydrogen fluoride/Fluorine	Difficult to quantify reduction amount due to normal production and process variation	No difference	There were no Amendments to the Plan
	Nitrogen oxides			
	Nitric acid			
	Nitrate ion in solution at pH>= 6.0			
	Ammonia (total)			
	PM ₁₀ and PM _{2.5}			

Certification Statements

Highest Ranking Employee

As of 25/05/2017, I, David Ingalls, certify that I have read the toxic substance reduction plan for the toxic substance referred to above 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.

Hydrogen fluoride (7664-39-3), Fluorine (7782-41-4), Nitrogen oxides (11104-93-1), Nitric acid (7697-37-2), Nitrate ion in solution at pH>= 6.0 (NA-17), Ammonia (total) (NA - 16), PM₁₀ (NA - M09) and PM_{2.5} (NA - M10)

Signature		Name	Position	General Manager	Company Name	Cameco Corporation
		Dave Ingalls				