North American Palladium Ltd. - Lac des Iles Mine

Ontario's Toxic Reduction Act - Public Report

Date of Most Recent Plan December 31st, 2013
Report Date June 1st, 2015

This Public Report covers the following group of substances:

Substance Name	Chemical Abstracts Service (CAS) No.
Arsenic (and its compounds)	7440-38-2
Cadmium (and its compounds)	7440-43-9
Chromium (and its compounds)	7440-47-3
Cobalt (and its compounds)	7440-48-4
Copper (and its compounds)	7440-50-8
Lead (and its compounds, except tetraethyl lead)	7439-92-1
Manganese (and its compounds)	7439-96-5
Mercury (and its compounds)	7439-97-6
Nickel (and its compounds)	7440-02-0
Selenium (and its compounds)	7782-49-2
Vanadium (and its compounds)	7440-62-2
Zinc (and its compounds)	7440-66-6
Particulate Matter (PM)	N/A-M08
Particulate Matter <10 mm diameter (PM10)	N/A-M09
Particulate Matter <2.5 mm diameter (PM2.5)	N/A-M10

Objectives and Targets of the Plan

The facility has set the following objectives intended to support the *Statement of Intent* through ongoing efforts to improve process efficiencies and waste reductio

- Ongoing research and testing of alternate flotation agents to improve recovery efficiencies;
- Ongoing research and evaluation of new mill equipment, upgrades and improvements intended to improve the recovery efficiencies;
- Ongoing research into alternative end uses for tailing materials; and
- Ongoing improvements to the facility's fugitive dust management activities to reduce overall particulate emissions from the site.

There have benn no Targets set for these Objectives

Facility Identification and Address

Company Name	North American Palladium Ltd.
Facility Name	Lac des Iles Mines Ltd.
Facility Physical Address	Unnumbered, signed, private road on the West side of Ontario Route 527
Street	Approximately 95 km north of the connection to Highway 17/11 (Trans-Canada Highway)
City	Thunder Bay
Province	Ontario
Facility Mailing Address	P.O.Box 10547
City	Thunder Bay
Province	Ontario
Postal Code	P7B 6T9
Facility Location-Geopgraphical Reference	UTM Easting 309000
**Expressed as UTM Coordinates within the NAD82 data set*	UTM Northing 5449000
Number of full-time employees	428
National Pollutant Release Inventory (NPRI) Identification Number	7369
Ontario Regulation 127/01 Identification Number	5414

Parent Company Identification and Address

Parent Company Information	
Name	North American Palladium Ltd.
Street Address	200 Bay Street - Unit 2350
City	Toronto
Province	Ontario
Postal Code	M5J 2J2
Percent Ownership	100%

Primary North American Industry Classification System (NAICS) Code

North American Industry Classification System (NAICS)	The two-digit NAICS Canada code:	21 Mining & Oil & Gas Extraction
	The four-digit NAICS Canada code:	2122 Metal Ore Mining
	The six-digit NAICS Canada code:	212299 All Other Metal Ore Mining

Company Contact Information

Public Contact

Name	Mike Wanecki
Position	Environmental Superintendent
Address	Same as Facility
Phone No.	807.448.2237

Parent Company Contact Information

Public Contact

Name	Tess Lofsky
Position	Vice President, General Counsel & Corporate Secretary
Address	Same as above (Bay St., Toronto)
Phone No.	416.360.7590

Progress Towards Implemention of the Plan

The following toxic substance reduction options have been slated for implementation on site

Develop road and stockpile Fugitive Dust Best Management Practices (BMP) Plan

It is not possible at this time to quantify the emission reductions associated with the development of the BMP.

The facility completed the development of a formal BMP in March of 2013, aproximately three (3) months behind schedule.

The facility worked towards implementation of the BMP as described in the Plan and met the implementation goal of April 2013.

Provide Fugitive Dust Best Management Practices training to relevant staff

It is not possible at this time to quantify the emission reductions associated with the development of or implementation of the BMP training program.

The facility continued working towards the development of the Fugitive dust BMP Training program as described in the Plan, but its completion has been delayed unti 2015.

Aditional Reduction Activities

The facility completed construction of its new underground mine development at the end of 2013, greatly reducing the volume of heavy truck traffic onsite as ore is no longer trucked out of the old Open Pit entrance.

This change resulted in a decrease of approximately 80 tonnes/year, or 35% in the calculated release of particulate matter (TSP) from the site.

The release of all Toxic Compounds associated with these fugitive dust emissions have been likewise reduced by approximately 35%.

Toxic Substace Acounting

Compound	CAS No.	Year	Used / Entering Process (Tonne/year)	Created (Tonne/year)	Released to Air (Tonne/year)	Released to Land (Tonne/year)	Released to Water (Tonne/year)	Contained in Product (Tonne/year)	Transfers for Disposal (Tonne/year)
Arsenic	7440382	2014	4.8	--	0.0005	6.4	0.0004	0.32	--
		2013	3.8	--	0.0005	2.0	0	0.25	--
Year / Year Change		Percent (%)	22%	0%	8%	68%	100%	21%	--
		Mass (Tonne)	1	--	0.00004	4.4	0	0.1	--
Cadmium	7440439	2014	0.33	--	0.00002	0.24	0	0.05	--
		2013	0.26	--	0.00003	0.20	0	0.04	--
Year / Year Change		Percent (%)	22%	0%	-49%	16%	-	21%	--
		Mass (Tonne)	0	--	-0.00001	0.04	0	0.0	--
Chromium	7440473	2014	396	--	0.025	596	0	5.8	--
		2013	309	--	0.037	389	0	4.6	--
Year / Year Change		Percent (%)	22%	0%	-49%		-	21%	--
		Mass (Tonne)	87	--	-0.012		0	1.2	--
Cobalt	7440484	2014	242	--	0.009	179	0	29	--
		2013	188	--	0.012	101	0	23	--
Year / Year Change		Percent (%)	22%	0%	-42%		-	21%	--
		Mass (Tonne)	53	--	-0.004		0	6.2	--
Copper	7440508	2014	2219	--	0.046	1246	0.0017	1506	--
		2013	1730	--	0.061	309	0.0014	1188	--
Year / Year Change		Percent (%)	22%	0%	-31%		17%	21%	--
		Mass (Tonne)	489	--	-0.014		0.0003	319	--
Lead	7439921	2014	29	--	0.020	36	0.0001	6.0	--
		2013	23	--	0.022	5	0.0001	2.4	--
Year / Year Change		Percent (%)	20%	0%	-13%		5%	60%	--
		Mass (Tonne)	5.8	--	-0.0025		0	3.6	--
Manganese	7439965	2014	2551	--	0.16	3058	0	7.4	--
		2013	1990	--	0.24	1784	0	5.8	--
Year / Year Change		Percent (%)	22%	0%	-49%	42%	-	21%	--
		Mass (Tonne)	562	--	-0.078	1274	0	1.6	--
Mercury	7439976	2014	0.40	--	0.00003	0.014	0.000003	0.0032	--
		2013	0.31	--	0.00004	0.011	0.000003	0.0025	--
Year / Year Change		Percent (%)	22%	0%	-49%	24%	-22%	21%	--
		Mass (Tonne)	0.089	--	-0.000014	0.0034	-0.000001	0.0007	--

Compound	CAS No.	Year	Used / Entering Process (Tonne/year)	Created (Tonne/year)	Released to Air (Tonne/year)	Released to Land (Tonne/year)	Released to Water (Tonne/year)	Contained in Product (Tonne/year)	Transfers for Disposal (Tonne/year)
Nickel	7440020	2014	3118	--	0.11	2266	0.020	861	--
		2013	2432	--	0.15	1390	0.016	679	--
Year / Year Change		Percent (%)	22%	0%	-41%	39%	20%	21%	--
		Mass (Tonne)	687	--	-0.04	876	0.004	182	--
Selenium	7782492	2014	7.8	--	0.0005	3.4	0	3.1	--
		2013	6.1	--	0.0007	2.0	0	2.5	--
Year / Year Change		Percent (%)	22%	0%	-49%	39%	-	21%	--
		Mass (Tonne)	1.7	--	-0.0002	1.3	0	0.7	--
Vanadium	7440622	2014	262	--	0.016	350	0	0.86	--
		2013	205	--	0.024	213	0	0.68	--
Year / Year Change		Percent (%)	22%	0%	-49%	39%	-	21%	--
		Mass (Tonne)	58	--	-0.008	137	0	0.2	--
Zinc	7440666	2014	113	--	0.007	132	0.0012	15	--
		2013	88	--	0.011	82	0.0006	12	--
Year / Year Change		Percent (%)	22%	0%	-49%	38%	54%	21%	--
		Mass (Tonne)	25	--	-0.003	50	0.0007	3.2	--
PM	N/A-M08	2014	--	189	189	--	--	--	--
		2013	--	272	272	--	--	--	--
Year / Year Change		Percent (%)	--	-44%	-44%	--	--	--	--
		Mass (Tonne)	--	-83	-83	--	--	--	--
PM10	N/A-M09	2014	--	51	51	--	--	--	--
		2013	--	74	74	--	--	--	--
Year / Year Change		Percent (%)	--	-46%	-46%	--	--	--	--
		Mass (Tonne)	--	-23	-23	--	--	--	--
PM2.5	N/A-M10	2014	--	7	7	--	--	--	--
		2013	--	11	11	--	--	--	--
Year / Year Change		Percent (%)	--	-40%	-40%	--	--	--	--
		Mass (Tonne)	--	-3	-3	--	--	--	--

Plan Amendments

There were no amendments made to the Plan durung 2014.

Other Toxic Substances Requiring Plans to be Prepared

Not Applicable

Certification

As of June 1, 2015, I certify that I have read the reports on the toxic substance reduction plans for the above listed compounds, and to my knowledge the information contained in the report is factually accurate and the reports comply with the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 (General) made under the Act.

Highest Ranking Employee / Certifying Official:

Phil du Toit
President