BEST THERATRONICS – 413 MARCH ROAD, OTTAWA

TOXICS REDUCTION ACT, O. REG. 455/09 – 2020RY PUBLIC REPORT

The Toxics Reduction Act and O. Reg. 455/09 went into effect on January 1, 2010. This Act requires companies with the NAICS code beginning with 31, 32, 33 or 212 and that meet NPRI and/or acetone reporting thresholds, to report their toxic substance accountings and to create/update a Toxics Reduction Plan for the reportable substances. Section 27 (1) of the Regulation requires companies to prepare/update public reports with the following information.

The Best Theratronics facility at 413 March Road, Ottawa uses lead in manufactured products as a shielding device from the radiation source. Lead is considered a toxic material; therefore, the site is required to track and quantify lead usage annually and develop a toxic substance reduction plan.

Name & CAS # of Substance(s)						
Lead (and its compounds)	N/A					
Facility Identification and Site Address						
Company Name	Best Medical International, Inc.					
Facility Name	Best Theratronics Ltd.					
Facility Address	413 March Road					
	Ottawa, ON, K2K 0E4					
Spatial Coordinates of Facility	428380m E 5020994m N (zone 18)					
Number of Employees	150					
NPRI ID	11667					
Primary North American Industrial Classification System Code (NAICS)						
2 Digit NAICS Code	33 – Manufacturing					
4 Digit NAICS Code	3391 – Medical equipment and supplies manufacturing					
6 Digit NAICS Code	339110 – Medical equipment and supplies manufacturing					
Company Contact Information						
Facility Public Contact	Jessica Mayda, Quality and Regulatory Specialist					
	Email: jessica.mayda@theratronics.ca					
	Phone: 613-591-2100 ext 2536					

BASIC FACILITY INFORMATION

PLAN SUMMARY - LEAD (AND ITS COMPOUNDS)

STATEMENT OF INTENT

Best Theratronics Ltd. is committed to taking a leadership role in protecting the environment. Whenever feasible, we will reduce the use of lead in compliance with all Federal and Provincial Regulations. We are committed to using our on-going continual improvement programs as a method to look for opportunities to reduce the use of lead.

OBJECTIVES

Best Theratronics will continue to work with our clients and conduct research and development to find new opportunities to reduce the use of lead. At this time, Best Theratronics does not have a set reduction target for lead usage.

DESCRIPTION OF WHY LEAD IS USED AT THE FACILITY

Best Theratronics engages in designing, manufacturing, installing, and servicing external beam teletherapy machines (isotope based) to treat cancer and self-contained blood irradiators (isotope and x-ray based) to treat prevent Graft vs. Host Disease. Lead is used in manufactured products as a shielding device from the radiation source.

RATIONALE FOR NOT IMPLEMENTING

Based upon the technical and economic feasibility review, business decisions, and available resources, none of the reduction options will be implemented at this time. Further research and development will be allocated to find feasible solutions to reduce the use of lead at the facility.

TOXIC SUBSTANCE REDUCTION PLANNER CONTACT INFORMATION

Planner Contact Information							
Planner Responsible for	Jenna Boyce, P.Eng.	TSRP0022					
Making Recommendations	Environmental Engineer						
	jboyce@blumetric.ca	BluMetric Environmental Inc.					
	Phone: 613-839-3053 ext 274	3108 Carp Road					
		Ottawa, ON, K0A 1L0					
Planner Responsible for	Jenna Boyce, P.Eng.	TSRP0022					
Certification	Environmental Engineer						
	jboyce@blumetric.ca	BluMetric Environmental Inc.					
	Phone: 613-839-3053 ext 274	3108 Carp Road					
		Ottawa, ON, K0A 1L0					

CERTIFICATIONS

The plan has not been amended since it was initially developed; the following are the certification statements from the TRA reduction plan for Lead.

11. CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of December 18, 2013, I, Richard Wassenaar, certify that I have read the toxic substance reduction plan for lead and am familiar with its contents, and to my knowledge the plan is factually accurate and, with the exception of the regulatory deadline, the plan meets all other requirements of the act and regulation. The Plan did not meet the December 31, 2012 deadline since the company is a Federally regulated nuclear facility and believed to be exempt from Provincial Regulations. The TRA Accounting and Plan were prepared for the 2012 reporting year.

Please contact facility to view signature.

Richard Wassenaar Director, Compliance Best Theratronics Ltd.

C-B11167-00-06	Confidential
Lead Reduction Plan	FINAL
Best Theratronics Ltd., Ottawa	December 2013

12. CERTIFICATION BY TOXIC SUBSTANCE REDUCTION PLANNER

As of December 18, 2013 I, Jenna Boyce certify that I am familiar with the processes at Best Theratronics Ltd. that use and create the toxic substances lead, 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 toxic substance reduction plan dated December 2013 and, with the exception of the regulatory deadline, the plan meets all other requirements of the act and regulation.

Please contact facility to view signature.

Jenna Boyce, P. Eng. (Planner License # TSRP0022) Environmental Engineer WESA, a Division of BluMetric Environmental Inc.

ANNUAL REPORT - LEAD (AND ITS COMPOUNDS)

TRACKING AND QUANTIFICATION

Reporting Year	Facility-wide Lead Quantities (kg)							
	Used	Created	Contained	Released to	Off-Site	Off-Site	Reasons for Change From	
			in Product	Air	Disposal	Recycling	Previous Year	
2012	>100,000	0	>10,000	0.086	0	13,725.097	-	
	to		to 100,000					
	1,000,000							
2013	>100,000	0	>10,000	0.081	0	17,193.111	Change in production.	
	to		to 100,000				Change in data accuracy.	
	1,000,000						Recycling amount will	
							vary from year to year.	
2014	>10,000	0	>10,000	0.046	0	1,535.972	Change in production.	
	to 100,000		to 100,000			, ,	Recycling amount will	
							vary from year to year.	
2015	>10,000	0	>10,000	0.033	0	26,299.749	Change in production.	
	to 100,000		to 100,000			,	Recycling amount will	
	,		,				vary from year to year,	
							recycled 4 Theratrons.	
2016	>10,000	0	>10,000	0.036	35.795	13,210.674	Change in production	
	to 100,000	-	to 100,000			,	levels. In 2016, 4	
							Theratron machines were	
							returned for recycling and	
							approx. 30 machine	
							heads were taken from storage and lead	
							components were sent	
							for recycling. This process	
							is highly variable between	
							years.	
2017	>10,000	0	>10,000	0.012	0	2,447.297	Change in production	
	to 100,000		to 100,000				levels. In 2017, 3 Theratron machines were	
							returned for recycling.	
2018	>10,000	0	>10,000	0.028	0	1,857.407	Change in production	
	to 100,000		to 100,000				levels. In 2018, no	
							Theratron machines were	
2019	>10,000	0	>10,000	0.024	0	12,067.468	recycled. Change in production	
2017	to 100,000	U	to 100,000	0.024	U	12,007.400	levels. Development of a	
	10 100,000		10 100,000				new product and	
							contract manufacturing.	
2020	>10,000	0	>10,000	0.056	0	12,067.468	Change in production	
	to 100,000		to 100,000				levels.	
Change from	>10,000	0 kg	>10,000	(+)	0	(-)10,201.063	Change in production	
previous year	to 100,000		to 100,000	0.032			levels. Recycling and	
(2020 : 2019)							disposal amount will vary	
	(+)140%		(+)135%	(+)133%		(-)85%	from year to year.	

Used, created and contained in product can be expressed in the following ranges:

> 0 to 1 > 1 to 10 > 10 to 100 > 100 to 1,000 > 1,000 to 10,000 > 10,000 to 100,000 > 100,000 to 1,000,000

ANNUAL REPORT CERTIFICATION STATEMENT

As of September 24, 2021, I, Jessica Mayda, certify that I have read the reports on the toxic substance reduction plans for the toxic substances referred to below and am familiar with their contents, and to my knowledge the information contained in the reports is factually accurate and the reports comply with the Toxics Reduction Act, 2009 and Ontario regulation 455/09 (General) made under the Act.

- Lead (and its compounds)

Please contact facility to view signature.

Jessica Mayda Best Theratronics Ltd.