CURTISS-WRIGHT – OTTAWA, CANADA

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

The Curtiss-Wright Ottawa location uses Lead in solder during the manufacturing process. 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.

BASIC FACILITY INFORMATION

Name & CAS # of Substance(s)	
Lead (and its compounds)	7439-92-1
Facility Identification and Site Address	
Company Name	Dy4 Systems Inc.
Facility Name	Curtiss-Wright
Facility Address	Physical Address:
	333 Palladium Drive Ottawa, ON K2V 1A6 Canada
Spatial Coordinates of Facility	428770m E 5016635m N (zone 18)
Number of Employees	314
NPRI ID	11820
Primary North American Industrial Classification System Code (NAICS)	
2 Digit NAICS Code	33 – Manufacturing
4 Digit NAICS Code	3344 – Semiconductor and other electronic component manufacturing
6 Digit NAICS Code	334410 – Semiconductor and other electronic component manufacturing
Company Contact Information	
Facility Public Contact	Franco Cantusci *Maintenance Operations, Supervisor – Designated Official*
	Email: Franco.Cantusci@curtisswright.com
	Phone: 613-599-9199 ext. 5293

PLAN SUMMARY – LEAD (AND ITS COMPOUNDS)

STATEMENT OF INTENT

Curtiss-Wright 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. We are committed to continual improvement and reducing the amount of Lead used at this facility whenever possible.

OBJECTIVES

Curtiss-Wright will continue to work with our clients to look for opportunities to reduce the use of Lead. Curtiss Wright's objective is to reduce the amount of Lead used at the Ottawa facility as new lead-free product designs become available.

DESCRIPTION OF WHY LEAD IS USED AT THE FACILITY

Curtiss-Wright manufactures embedded computing devices. Based on customer requirements, lead components are required in the computing devices. As a result, lead is used in the facility manufacturing processes as a formulation component.

RATIONALE FOR NOT IMPLEMENTING

Based upon the above technical and economic feasibility review, business decisions, and available resources, none of the 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 Making Recommendations	Jenna Boyce, P.Eng. *Environmental Engineer*	TSRP0022
	jboyce@wesa.ca	WESA, a division of BluMetric Environmental Inc. 3108 Carp Road Ottawa, ON, K0A 1L0
	Phone: 613-839-3053 ext 274	
	Fax: 613-839-5376	
Planner Responsible for Certification	Jenna Boyce, P.Eng. *Environmental Engineer*	Contact information if different from planner responsible for making recommendation
	jboyce@wesa.ca	WESA, a division of BluMetric Environmental Inc. 3108 Carp Road Ottawa, ON, K0A 1L0
	Phone: 613-839-3053 ext 274	
	Fax: 613-839-5376	

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 OFFICER

As of December 17, 2013, I, Duncan McCartney, 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 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 was not aware of this deadline date.

Duncan McCartney
Manager Facilities & EHS, CGP – Designated Official
Curtiss Wright Controls Embedded Computing

12. CERTIFICATION BY TOXIC SUBSTANCE REDUCTION PLANNER

As of December 17, 2013 I, Jenna Boyce certify that I am familiar with the processes at Curtiss Wright Controls Embedded Computing, that use and create the toxic substance 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.

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 in Product	Released to Air	Off-Site Disposal	Off-Site Recycling	Reasons for Change From Previous Year
2011	>100 to 1000	0	>100 to 1000	0.065	0	665.984	
2012	>100 to 1000	0	>10 to 100	0.049	0.493	752.290	Change in production, expired product and disposal amount will vary from year to year.
2013	>100 to 1000	0	>100 to 1000	0.046	0.093	693.835	Expired product and disposal amount will vary from year to year.
2014	>100 to 1000	0	>10 to 100	0.044	0.040	859.363	Expired product and disposal amount will vary from year to year.
2015	> 1000 to 10000	0	>100 to 1000	0.041	0.061	1025.813	Usage and transfers increased because dross from an old machine was emptied as part of decommissioning. Expired product and disposal amount will vary from year to year.
2016	>100 to 1000	0	>10 to 100	0.042	0.031	243.441	Change in production, new Wave machine in operation since end of 2015. Expired product and disposal amount will vary from year to year.
2017	>100 to 1000	0	>10 to 100	0.035	0.032	276.090	Expired product and disposal amount will vary from year to year.
2018	>100 to 1000	0	>10 to 100	0.034	0.015	151.382	Expired product and disposal amount will vary from year to year.
2019	>100 to 1000	0	>10 to 100	0.026	0.031	213.706	Expired product and disposal amount will vary from year to year.
2020	>100 to 1000	0	>10 to 100	0.024	0.375	145.645	Expired product and disposal amount will vary from year to year. Off-site disposal quantity is based on an averaged analytical concentration.
Change from previous year (2020 : 2019)	>1 to 10 kg (-)2.6%	0 kg 0%	> 10 to 100 kg (-)7.6%	(-) 0.0022 kg (-)8.5%	0.344 kg 1110%	(-) 68.061 kg -31%	The amount contained in product is based on a mass balance and will vary depending on the amount transferred off-site for disposal and recycling.

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

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

CERTIFICATION STATEMENT

As of September 10, 2021, I, Franco Cantusci, certify that I have read the report on the toxic substance reduction plan for the toxic substance 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 (7439-92-1)

Franco Cantusci

Franco Cantusci
Maintenance Operations, Supervisor
Curtiss-Wright