

Toxics Reduction Plan Summaries

Required by Ontario Toxic Reduction Act (2009) Ontario Regulation 455/09

Prepared for: **Brampton Brick Limited** 225 Wanless Drive Brampton ON, L7A 1E9

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Facility Information

Company Name:	Brampton Brick Limited
Facility Name	Brampton Brick
NPRI Identification No.	7302
Ontario MOE Identification No.	6957
NAICS 2 Code:	31-33 Manufacturing
NAICS 4 Code:	3271 Clay Product and Refractory Manufacturing
NAICS 6 Code:	327120
Number of Full Time Employees:	44
UTM Spatial Coordinates (NAD83):	Latitude: 43.7211 ; Longitude: -79.8164
Datum:	1983

Owner of the Facility Information

Name:	Brampton Brick Limited
	225 Wanless Drive, Brampton ON
	L7A 1E9

Operator of the Facility Information

Name:	Brampton Brick Limited
	225 Wanless Drive, Brampton ON
	L7A 1E9

Highest Ranking Employee

Name:	Lauren Mulkerns
Title:	EHS Manager
Address:	Brampton Brick Limited
	225 Wanless Drive, Brampton ON
	L7A 1E9
Phone No.	(905) 840-1011
Fax No.	(905) 840-6126
Email:	Imulkerns@bramptonbrick.com

Parent Company Information

Legal Name of Parent Company:	Brampton Brick Limited
Address of Parent Company:	225 Wanless Drive, Brampton ON
	L7A 1E9
Percentage of Facility Owned by	100%
Company:	
CCRA Business No.	100621424



Toxic Substances for Which Facility Must Prepare:

Substances:	Carbon Monoxide – CAS 630-08-0
	Hydrogen Chlorides – CAS 7647-01-0
	Nitrogen Oxides - CAS 11104-93-1
	Sulfur Dioxide – CAS7446-09-5
	Particulate Matter (Total)
	Particulate Matter (less than 10µm)
	Particulate Matter (less than 2.5µm)
	Particulate Matter (less than 2.5µm)

Plan Contacts

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Person Coordinating the Preparation of the Plan	Lauren Mulkerns EHS Manager 225 Wanless Drive, Brampton ON, L7A 1E9 Phone: (905) 840-1011 Fax: (905) 840-6126 Imulkerns@bramptonbrick.com
Person Who Prepared the Plan	Lauren Mulkerns EHS Manager 225 Wanless Drive, Brampton ON, L7A 1E9 Phone: (905) 840-1011 Fax: (905) 840-6126 Imulkerns@bramptonbrick.com
Public Contact	Lauren Mulkerns EHS Manager 225 Wanless Drive, Brampton ON, L7A 1E9 Phone: (905) 840-1011 Fax: (905) 840-6126 Imulkerns@bramptonbrick.com
Technical Contact	Lauren Mulkerns EHS Manager 225 Wanless Drive, Brampton ON, L7A 1E9 Phone: (905) 840-1011 Fax: (905) 840-6126 Imulkerns@bramptonbrick.com



Notice

As of April 18, 2019, the Ministry of the Environment, Conservation and Parks posted decision on the Environmental Registry of Ontario (EBO No.013-4234) to repeal the *Toxics Reduction Act* and associated regulations by December 31, 2021.

As a result, only facilities with existing Toxics Reduction plans will be required to report annually on substances which meet the prescribed thresholds. Reports will not be updated.

Statement of Intent

Based on the nature of the facility operation, no toxics reduction options have been identified as feasible for the facility. However, Brampton Bick Ltd. is committed to playing a leadership role in protecting the environment. The company will continue to implement their Quality Management system as part of their standard operating practices, and to conduct testing to evaluate technically and economically feasible options to reduce the creation of the subject toxic substance. Employees in the company are encouraged to participate in all types of toxics use reduction activities.

Objectives

Brampton Brick has taken the following proactive initiatives to reduce the creation and release of toxic substances:

- Product reformulation: The facility has conducted tests to use up to 5% of calcine material to reduce the brick mass and the amount of shale used per brick. The facility will perform additional trials to determine the feasibility of using the material to replace shale in the brick.
- Spill and leak prevention: The facility has implemented Kiln Leak Testing Procedures to prevent the release and emissions of the toxic substance during brick production.
- Inventory management and operating practices: The facility applied emission control means and best management practice plans to minimize the generation of dust and prevent potential emissions and leaks of particulate matter during the manufacturing processes.

Toxics use reduction will be an ongoing effort for Brampton Brick, and the company will continue to test technological advancements to ensure that reduction options that are both technologically and financially viable are implemented at the facility.

The company will continue their quality management system and kiln leak testing procedures, further improve their inventory management system and operation practices to prevent the release and emissions of the toxic substance during brick production.



Carbon Monoxide - CAS 630-08-0

Substance Activity	2020 (Current Year)	2019 (Previous Year)	Change from Previous Year	Change from Previous Year (tonnes)	Reason for Change	Reduction Options
Use	0	0	-	-	-	
Created (tonnes)	174.84	133.21	41.60	31.2%	Increase in Production	No technological or financially feasible
Released to Air (tonnes)	174.84	133.21	41.60	31.2%		options identified.
Released to Water	0	0	-	-	-	
Disposed onsite	0	0	-	-	-	
Disposed offsite	0	0	-	-	-	
Transferred for Recycling	0	0	-	-	-	
Contained in product that leaves the facility	0	0	-	-	-	
Transformed to other substances	0	0	-	-	-	
Destroyed at the facility	0	0	-	-	-	_

Hydrochloric Acid - CAS 7647-01-0

Substance Activity	2020 (Current Year)	2019 (Previous Year)	Change from Previous Year	Change from Previous Year (tonnes)	Reason for Change	Reduction Options
Use	0.59	0.28	0.31	52.5%		
Created (tonnes)	65.57	60.2	5.37	8.92	Increase in Production	No technological or financially feasible options identified.
Released to Air (tonnes)	28.55	19.14	9.41	49.14		
Released to Water	0	0	-	-	-	
Disposed onsite	0	0	-	-	-	
Disposed offsite	0	0	-	-	-	
Transferred for Recycling	0	0	-	-	-	
Contained in product that leaves the facility	0	0	-	-	-	
Transformed to other substances	0	0	-	-	-	
Destroyed at the facility	0	0	-	-	-	



Nitrogen Oxides - CAS 11104-93-1

Substance Activity	2020 (Current Year)	2019 (Previous Year)	Change from Previous Year	Change from Previous Year (tonnes)	Reason for Change	Reduction Options
Use	0	0	-	-	-	
Created (tonnes)	52.54	40.05	12.49	31.2%	Increase in Production	No technological or financially feasible
Released to Air (tonnes)	52.54	40.05	12.49	31.2%		options identified.
Released to Water	0	0	-	-	-	
Disposed onsite	0	0	-	-	-	
Disposed offsite	0	0	-	-	-	
Transferred for Recycling	0	0	-	-	-	
Contained in product that leaves the facility	0	0	-	-	-	
Transformed to other substances	0	0	-	-	-	
Destroyed at the facility	0	0	-	-	-	

Sulfur Dioxide - CAS7446-09-5

Substance Activity	2020 (Current Year)	2019 (Previous Year)	Change from Previous Year	Change from Previous Year (tonnes)	Reason for Change	Reduction Options
Use	0	0	-	-	-	
Created (tonnes)	68.33	52.08	16.25	31.2%	Increase in Production	No technological or financially feasible
Released to Air (tonnes)	68.33	52.08	16.25	31.2%		options identified.
Released to Water	0	0	-	-	-	
Disposed onsite	0	0	-	-	-	
Disposed offsite	0	0	-	-	-	
Transferred for Recycling	0	0	-	-	-	
Contained in product that leaves the facility	0	0	-	-	-	
Transformed to other substances	0	0	-	-	-	
Destroyed at the facility	0	0	-	-	-	



Particulate Matter (Total)

Substance Activity	2020 (Current Year)	2019 (Previous Year)	Change from Previous Year	Change from Previous Year (tonnes)	Reason for Change	Reduction Options
Use	0	0	-	-	-	
Created (tonnes)	57.86	38.89	18.97	48.8%	Increase in Production	No technological or financially feasible options identified.
Released to Air (tonnes)	57.86	38.89	18.97	48.8%		
Released to Water	0	0	-	-	-	
Disposed onsite	0	0	-	-	-	
Disposed offsite	0	0	-	-	-	
Transferred for Recycling	0	0	-	-	-	
Contained in product that leaves the facility	0	0	-	-	-	
Transformed to other substances	0	0	-	-	-	
Destroyed at the facility	0	0	-	-	-	

Particulate Matter (less than 10µm)

Substance Activity	2020 (Current Year)	2019 (Previous Year)	Change from Previous Year	Change from Previous Year (tonnes)	Reason for Change	Reduction Options
Use	0	0	-	-	-	
Created (tonnes)	45.17	29.74	15.43	51.9%	Increase in Production	No technological or financially feasible options identified.
Released to Air (tonnes)	45.17	29.74	15.43	51.9%		
Released to Water	0	0	-	-	-	
Disposed onsite	0	0	-	-	-	
Disposed offsite	0	0	-	-	-	
Transferred for Recycling	0	0	-	-	-	
Contained in product that leaves the facility	0	0	-	-	-	
Transformed to other substances	0	0	-	-	-	
Destroyed at the facility	0	0	-	-	-	



Particulate Matter (less than 2.5µm)

Substance Activity	2020 (Current Year)	2019 (Previous Year)	Change from Previous Year	Change from Previous Year (tonnes)	Reason for Change	Reduction Options
Use	0	0	-	-	-	
Created (tonnes)	25.21	16.62	8.59	51.7%	Increase in Production	No technological or financially feasible options identified.
Released to Air (tonnes)	25.21	16.62	8.59	51.7%		
Released to Water	0	0	-	-	-	
Disposed onsite	0	0	-	-	-	
Disposed offsite	0	0	-	-	-	
Transferred for Recycling	0	0	-	-	-	
Contained in product that leaves the facility	0	0	-	-	-	
Transformed to other substances	0	0	-	-	-	
Destroyed at the facility	0	0	-	-	-	

225 Wanless Drive Brampton ON, L7A 1E9



Plan Certifications

Carbon Monoxide

Hydrochloric Acid

CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of December 16, 2013, I, Brad Obbbledick, certify that I have read the toxic substance reduction plan far the toxic substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Obtario Regulation 455/09 (General) made under that Act.

Toxic Substance: Carbon monoxide (CO) (CAS 630-08-0)

E. C. C. Date

Brad Cobbledick
Vice Fresident of Technical Services
228 Wanless Drive, Brampton, ON L7A1E9
(908) 340-0126
brobbledick@bramptonbrick.com

December 16, 2013

CERTIFICATION BY LICENSED PLANNER

As of December 16, 2013, 1, Rasous (Boris) Chen certify that I am familiar with the processor at Reampton Brick Limited that use or existe the tuxic substance redirent to below, that I agree with the estimates reterred to in subprangulpy 2015, it and vel subsection 4(1) of the Torise Roduction Art, 2000 that are set out in the plan dated December 16, 2003 and that the plan complies with that Act and Outzrio Regulation 4(25) of Generally made under that Act.

Toxic Substance: Carbon monoxide (CO) (CAS 630-08-0)

Russon (Boris) Chen (License No. TSRP0239)
Project Manager, Environmental Services
Stantee

Stantec 300 - 675 Cochrane Drive West Tower Markham ON L3R oB8 Phone: (905) 415-6351 boris.chen@stantec.com

CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of December 4, 2012, I, Brad Cobbledick, certify that I have read the toxic substance reduction plan for the toxic substance referred to below 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.

Toxic Substance: Hydrogen chloride (HCI)

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Dec 5, 2012

Date

Brad Cobbledick
Technical Director
259 Wanless Drive, Drempton, ON L7A1E9
(905) 840-1011
(905) 840-6125
bcobbledick@bramptonbrick.com

CERTIFICATION BY LICENSED PLANNER

As of December 4, 2012, I, Ruoou (Boris) Chen certify that I am familiar with the processes at Brampton Brick Limited that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and vof subsection 4(1) of the Toxics Reduction Act, 2009 that are set out in the plan dated October 1, 2012 and that the plan compiles with that Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: Hydrogen chloride (HCI)

Dec 4,2012

Date

Rusou (Boris) Chen (License No. TSRP0239)
Project Manager, Environmental Sciences
Stantec
300 - 675 Cochrane Drive West Tower
Markham ON L3R 088
Phone: (805) 415-6351
boris.chen@stantec.com



Nitrogen Oxides

CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of December 16, 2013, I, Brad Cobbledick, certify that I have read the toxic substance reduction plan As or December 10, 2013, 5, then Coobsened, Centry unit 1 nave rem me now substance removed punt for the toxic substance referred to below 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.

Date

December 16, 2013

Docember 16, 2013

December 18 2013

December 16, 2013

Toxic Substance: Nitrogen Oxides (NOx) (CAS 11104-93-1)

Brad Cabbledick
Vice President of Technical Services
225 Wanless Drive, Brampton, ON LyArE9
(905) 840-6126
bobbledick@bramptonbrick.com

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CERTIFICATION BY LICENSED PLANNER

As of December 16, 2013, I, Rusou (Boris) Chan certify that I am familiar with the processes at Brampton Brick Limited that use or create the toxic substance referred to below, 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 plan dated December 16, 2023 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: Nitrogen Oxides (NOx) (CAS 11104-93-1)

Rusou (Boris) Chen (License No. TSRP0239) Project Manager, Environmental Services Stantee

Stantes 300 - 675 Cochrane Drive West Tower Markham ON L3R 0B8 Phone: (905) 445-6354 boris.chen@stantec.com

China

Date

Sulfur Dioxide

CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of December 16, 2013, 1, Brad Cobbledick, certify that I have read the toxic substance reduction plan for the toxic substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Outario Regulation 455/09 (General) made under that Act.

Toxic Substance: Sulfur Dioxide (SO₂) (CAS 7446-09-5)

Brad Cobbledick Vice President of Technical Services 225 Wanless Drive, Brampton, ON LyALE9 (905) 840-1026 beobbledick@bramptonbrick.com

B. Gill

CERTIFICATION BY LICENSED PLANNER

As of December 16, 2013, I, Rucou (Boris) Chen certify that I am familiar with the processes at Brampton Brick Limited that use or create the toxic substance referred to below, 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 plan dated December 16, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: Sulfur Dioxide (SO₅) (CAS 7446-09-5)

Ruoou (Boris) Chen (License No. TSRP0239)
Project Manager, Environmental Services
Stantes
200 - 675 Cochrane Drive West Tower
Markham ON LSR 088
Phone (Coch Page 678)

Phone: (905) 415-6351 boris.chen@stantec.com

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Particulate Matter (Total)

CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of December 16, 2013, I, Brad Cobbledick, certify that I have read the toxic substance reduction plan for the toxic substance referred to below and an familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Toxics Reduction Act, 2009 and Ontario Regulation 465/09 (General) made under that Act.

Toxic Substance: Particulate matter (PM) (CAS N/A)

Brad Cobbledick Vice President of Technical Services 223 Wanless Drive, Brampton, ON L7A1E9 (965) 840-1126 [905] 840-6126 [bodbbledick@bramptochrick.com

E. alles

December 16,2013

Date

CERTIFICATION BY LICENSED PLANNER

As of December 16, 2013, I, Rucou (Boris) Chen certify that I am familiar with the processes at Brampton Brick Limited that use or create the toxic substance referred to helow, 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 plan dated December 16, 2013 and that the plan complies with that Act and Octorio Regulation 455/09 (General) made under that Act.

Toxic Substance: Particulate matter (PM) (CAS N/A)

Cano-Ruoqu (Boris) Chen (License No. TSRP0239) Project Manager, Environmental Services

Stantec 300 - 675 Cochrane Drive West Tower Markham ON L3R oB8 Phone: (905) 415-6351 boris.chen@stantec.com

December 16, 2013

Particulate Matter (less than 10µm)

CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of December 16, 2013, I, Brad Cobbledick, certify that I have read the toxic substance reduction plan for the trace substance referred to below 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.

Toxic Substance: Particulate matter with less than 10 µm in diameter (PM.,)

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Brad Cubbledick Vice President of Technical Services 228 Wanless Drive, Brampton, ON L7A1E9 (905) 840-1031 (905) 840-6125 bobbledickalbramptonbrick.com

December 16, 20.3 Date

CERTIFICATION BY LICENSED PLANNER

As of December 16, 2013, I, Ruoou (Boris) Chen certify that I am familiar with the processes at Brampton Brick Limited that use or create the toxic substance referred to below, 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 plan dated December 16, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: Particulate matter with less than 10 μm in diameter (PM $_{\rm to}$

O/Mer_ Ruccu (Boris) Chen (License No. TSRP0239) Project Manager, Environmental Services

300 - 675 Cochrane Drive West Tower Markham ON L3R 088 Phone: (905) 415-6351 boris.chen@stantec.com

December 16, 2013



Particulate Matter (less than 2.5µm)

CERTIFICATION BY HIGHEST RANKING EMPLOYEE

As of December 16, 2013, I, Brad Cobbledick, certify that I have read the toxic substance reduction plan for the toxic substance referred to below and am familiar with its contents, and to my knowledge the plan is factually accurate and complies with the Texics Reduction Act, 2009 and Octario Regulation 453/09 (General) made under that Act.

Toxic Substance: Particulate matter with less than 2.5 μm in diameter $(PM_{2,3})$

E. Colfleth December 16, 20,3

Brad Cohbiedick Date Brad Cobbledick Vice President of Terbaical Services 225 Wantes Drive, Brampton, ON L7AiE9 (905) 840-1941 (905) 840-195 beobbledick@bramptonbrick.com

CERTIFICATION BY LICENSED PLANNER.

As of December 16, 2013, I, Rusou (Boris) Chen certify that I am familiar with the processes at Brampton Brick Limited that use or create the toxic substance referred to below, that I agree with the estimates referred to in subparagraphs 7 iii, iv and v of subsection 4 (1) of the Tracks Reduction Act, 2009 that are set out in the plan dated December 16, 2013 and that the plan complies with that Act and Ontario Regulation 455/09 (General) made under that Act.

Toxic Substance: Particulate matter with less than 2.5 μm in diameter (PM2 $_{3})$

and Ruoou (Boris) Chen (License No. TSRP0239) Date Project Manager, Environmental Services Stantae

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December 16, 2013

Brampton ON, L7A 1E9