Report Preview

Report Details

Report Year	2014
Report Type:	NPRI,ON MOE TRA
Report Status:	Submitted
Modified Date/Time:	01/06/2015 11:16 AM

Company and Facility Details

Company Name:	Hanson Brick
Business Number:	881819189
Mailing Address:	Delivery Mode: GeneralDelivery Address Line 1: 5155 Dundas Street City, Province/Territory, Postal Code: Burlington Ontario L7R3Y2 Country: Canada
Facility Name:	Hanson Brick - Burlington
NAICS Code:	327990
NPRI ID:	635
Physical Address:	Address Line 1: 0 - 5155 Dundas Street City, Province/Territory, Postal Code: Burlington Ontario L7R3Y2 Country: Canada UTM Zone: 17 UTM Easting: 596677 UTM Northing: 4807518

Parent Companies

Company Name:	Hanson Brick America
Business Number:	881819189
Mailing Address:	Delivery Mode: GeneralDelivery Address Line 1: 555 - 15720 Delaney Drive City, Province/Territory, Postal Code: Charlotte NorthCarolina 28277 Country: UnitedStates

Contacts Details

Contact Type	Technical Contact, Certifying Official, Person who prepared the report, Person who coordinated the preparation of the Toxics Reduction Plan
Name:	Jack Hewitt
Position:	Projects and Environmental Manager
Telephone:	9053353401
Fax:	9053320571
Email:	jack.hewitt@hanson.biz

Contact Type	Contractor Contact
Name:	Erik Martinez
Position:	Environmental Consultant
Telephone:	5198840510
Fax:	5198840525
Email:	emartinez@craworld.com
Independent contractor/consultant company name:	Conestoga-Rovers & Associates Ltd.
Contact Type	Highest Ranking Employee
Name:	Shane Egan
Position:	VP Production
Telephone:	9056337384
Email:	shane.egan@hanson.com
Mailing Address:	Address Line 1: 5155 Dundas Street City, Province/Territory, Postal Code: Burlington Ontario L7R 3Y2 Country: Canada

General Information

Number of employees:	200
Activities for Which the 20,000-Hour Employee Threshold Does Not Apply:	None of the above
Activities Relevant to Reporting Dioxins, Furans and Hexacholorobenzene:	None of the above
Activities Relevant to Reporting of Polycyclic Aromatic Hydrocarbons (PAHs):	Wood preservation using creosote: No
Is this the first time the facility is reporting to the NPRI (under current or past ownership):	No
Is the facility controlled by another Canadian company or companies:	Yes
Did the facility report under other environmental regulations or permits:	No
Is the facility required to report one or more NPRI Part 4 substances (Criteria Air Contaminants):	Yes
Was the facility shut down for more than one week during the year:	No
Operating Schedule - Days of the Week:	Mon, Tue, Wed, Thu, Fri, Sat, Sun
Usual Number of Operating Hours per day:	24
Usual Daily Start Time (24h) (hh:mm):	07:00

Substance List

CAS RN	Substance Name	Releases	Releases (Speciated VOCs)	Disposals	Recycling	Unit
7789-75-5	Calcium fluoride	N/A	N/A	59.3200	N/A	tonnes
630-08-0	Carbon monoxide	73.2800	N/A	N/A	N/A	tonnes
7647-01-0	Hydrochloric acid	38.3400	N/A	N/A	N/A	tonnes
NA - 09	Manganese (and its compounds)	0.0818	N/A	N/A	N/A	tonnes
11104-93-1	Nitrogen oxides (expressed as NO2)	23.5700	N/A	N/A	N/A	tonnes
NA - M09	PM10 - Particulate Matter <= 10 Microns	23.5630	N/A	N/A	N/A	tonnes
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	2.5920	N/A	N/A	N/A	tonnes
7446-09-5	Sulphur dioxide	34.3900	N/A	N/A	N/A	tonnes
NA - M08	Total Particulate Matter	27.7200	N/A	N/A	N/A	tonnes
NA - 14	Zinc (and its compounds)	0.0028	N/A	N/A	N/A	tonnes

Applicable Programs

CAS RN	Substance Name	NPRI	ON MOE TRA	ON MOE Reg 127/01	First report for this substance to the ON MOE TRA
7789-75-5	Calcium fluoride	Yes	Yes		No
630-08-0	Carbon monoxide	Yes	Yes		No
7647-01-0	Hydrochloric acid	Yes	Yes		No
NA - 09	Manganese (and its compounds)	Yes	Yes		No
11104-93-1	Nitrogen oxides (expressed as NO2)	Yes	Yes		No
NA - M09	PM10 - Particulate Matter <= 10 Microns	Yes	Yes		No
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Yes	Yes		No
7446-09-5	Sulphur dioxide	Yes	Yes		No
NA - M08	Total Particulate Matter	Yes	Yes		No
NA - 14	Zinc (and its compounds)	Yes	Yes		No

General Information about the Substance - Releases and Transfers of the Substance

CAS RN	Substance Name	Was the substance released on-site	The substance will be reported as the sum of releases to all media (total of 1 tonne or less)	1 tonne or more of a Part 5 Substance (Speciated VOC) was released to air
7789-75-5	Calcium fluoride	No	No	No
7647-01-0	Hydrochloric acid	Yes	No	No
NA - 09	Manganese (and its compounds)	Yes	Yes	No
NA - 14	Zinc (and its compounds)	Yes	Yes	No

General Information about the Substance - Disposals and Off-site Transfers for Recycling

CAS RN	Substance Name	Was the substance disposed of (on-site or off-site), or transferred for treatment prior to final disposal	Is the facility required to report on disposals of tailings and waste rock for the selected reporting period	Was the substance transferred off-site for recycling
7789-75-5	Calcium fluoride	Yes	No	No
7647-01-0	Hydrochloric acid	No	No	No
NA - 09	Manganese (and its compounds)	No	No	No
NA - 14	Zinc (and its compounds)	No	No	No

General Information about the Substance - Nature of Activities

CAS RN	Substance Name	Manufacture the Substance	Process the Substance	Otherwise Use of the Substance
7789-75-5	Calcium fluoride	As a by-product		
7647-01-0	Hydrochloric acid	As a by-product		
NA - 09	Manganese (and its compounds)		As a formulation component	
NA - 14	Zinc (and its compounds)		As a formulation component	

TRA Quantifications

CAS RN	Substance Name	Use, Creation, Contained in Product	Quantity	Use ranges for public reporting
7789-75-5	Calcium fluoride	Use	0 tonnes	Yes
7789-75-5	Calcium fluoride	Creation	59.32 tonnes	Yes
7789-75-5	Calcium fluoride	Contained in Product	0 tonnes	Yes
630-08-0	Carbon monoxide	Use	0 tonnes	Yes
630-08-0	Carbon monoxide	Creation	73.28 tonnes	Yes
630-08-0	Carbon monoxide	Contained in Product		
7647-01-0	Hydrochloric acid	Use	0 tonnes	Yes
7647-01-0	Hydrochloric acid	Creation	38.34 tonnes	Yes
7647-01-0	Hydrochloric acid	Contained in Product	0 tonnes	Yes
NA - 09	Manganese (and its compounds)	Use	461.217 tonnes	Yes
NA - 09	Manganese (and its compounds)	Creation	0 tonnes	Yes
NA - 09	Manganese (and its compounds)	Contained in Product	461.135 tonnes	Yes
11104-93-1	Nitrogen oxides (expressed as NO2)	Use	0 tonnes	Yes
11104-93-1	Nitrogen oxides (expressed as NO2)	Creation	23.57 tonnes	Yes
11104-93-1	Nitrogen oxides (expressed as NO2)	Contained in Product		
NA - M09	PM10 - Particulate Matter <= 10 Microns	Use	0 tonnes	Yes

CAS RN	Substance Name	Use, Creation, Contained in Product	Quantity	Use ranges for public reporting
NA - M09	PM10 - Particulate Matter <= 10 Microns	Creation	23.563 tonnes	Yes
NA - M09	PM10 - Particulate Matter <= 10 Microns	Contained in Product		
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Use	0 tonnes	Yes
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Creation	2.592 tonnes	Yes
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Contained in Product		
7446-09-5	Sulphur dioxide	Use	0 tonnes	Yes
7446-09-5	Sulphur dioxide	Creation	34.39 tonnes	Yes
7446-09-5	Sulphur dioxide	Contained in Product		
NA - M08	Total Particulate Matter	Use	0 tonnes	Yes
NA - M08	Total Particulate Matter	Creation	27.72 tonnes	Yes
NA - M08	Total Particulate Matter	Contained in Product		
NA - 14	Zinc (and its compounds)	Use	16.000 tonnes	Yes
NA - 14	Zinc (and its compounds)	Creation	0 tonnes	Yes
NA - 14	Zinc (and its compounds)	Contained in Product	15.997 tonnes	Yes

TRA Quantifications - Others

CAS RN	Substance Name	Change in Method of Quantification	Reasons for Change	Description of how the change impact tracking and quantification of the substance	Description of how an incident(s) affected quantifications	Significant Process Change
7789-75-5	Calcium fluoride					No
630-08-0	Carbon monoxide					No
7647-01-0	Hydrochloric acid					No
NA - 09	Manganese (and its compounds)					No
11104-93-1	Nitrogen oxides (expressed as NO2)					No
NA - M09	PM10 - Particulate Matter <= 10 Microns					No
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns					No
7446-09-5	Sulphur dioxide					No
NA - M08	Total Particulate Matter					No
NA - 14	Zinc (and its compounds)					No

On-site Releases - Releases to air

CAS RN	Substance Name	Category	Basis of Estimate	Detail Code	Quantity
630-08-0	Carbon monoxide	Stack or Point Releases	O - Engineering Estimates		73.28 tonnes
7647-01-0	Hydrochloric acid	Stack or Point Releases	O - Engineering Estimates		38.34 tonnes
11104-93-1	Nitrogen oxides (expressed as NO2)	Stack or Point Releases	O - Engineering Estimates		23.57 tonnes
NA - M09	PM10 - Particulate Matter <= 10 Microns	Stack or Point Releases	O - Engineering Estimates		23.563 tonnes
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Stack or Point Releases	O - Engineering Estimates		2.592 tonnes
7446-09-5	Sulphur dioxide	Stack or Point Releases	O - Engineering Estimates		34.39 tonnes
NA - M08	Total Particulate Matter	Stack or Point Releases	O - Engineering Estimates		27.72 tonnes

On-site Releases - Releases to air - Total

CAS RN	Substance Name	Total - Releases to Air
630-08-0	Carbon monoxide	73.28 tonnes
7647-01-0	Hydrochloric acid	38.34 tonnes
11104-93-1	Nitrogen oxides (expressed as NO2)	23.57 tonnes
NA - M09	PM10 - Particulate Matter <= 10 Microns	23.563 tonnes
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	2.592 tonnes
7446-09-5	Sulphur dioxide	34.39 tonnes
NA - M08	Total Particulate Matter	27.72 tonnes

Total Quantity Released (All Media)

CAS RN	Substance Name	Category	Basis of Estimate	Detail Code	Quantity
NA - 09	Manganese (and its compounds)	Total Quantity Released	O - Engineering Estimates		0.0818 tonnes
NA - 14	Zinc (and its compounds)	Total Quantity Released	O - Engineering Estimates		0.0028 tonnes

On-site Releases - Total

CAS RN	Substance Name	Total releases
7647-01-0	Hydrochloric acid	38.34 tonnes

On-site Releases - Quarterly Breakdown of Annual Releases

CAS RN	Substance Name	Quarter 1	Quarter 2	Quarter 3	Quarter 4
7647-01-0	Hydrochloric acid	24.7	24.9	25.2	25.2
NA - 09	Manganese (and its compounds)	24.7	24.9	25.2	25.2
NA - 14	Zinc (and its compounds)	24.7	24.9	25.2	25.2

On-site Releases - Monthly Breakdown of Annual Releases

CAS RN	Substance Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
630-08-0	Carbon monoxide	8.5	7.7	8.5	8.2	8.5	8.2	8.5	8.5	8.2	8.5	8.2	8.5
11104-93-1	Nitrogen oxides (expressed as NO2)	8.5	7.7	8.5	8.2	8.5	8.2	8.5	8.5	8.5	8.2	8.2	8.5
NA - M09	PM10 - Particulate Matter <= 10 Microns	8.5	7.7	8.5	8.2	8.5	8.2	8.5	8.5	8.2	8.5	8.2	8.5
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	8.5	7.7	8.5	8.2	8.5	8.2	8.5	8.5	8.2	8.5	8.2	8.5
7446-09-5	Sulphur dioxide	8.5	7.7	8.5	8.2	8.5	8.2	8.5	8.5	8.2	8.5	8.2	8.5
NA - M08	Total Particulate Matter	8.5	7.7	8.5	8.2	8.5	8.2	8.5	8.5	8.2	8.5	8.2	8.5

On-site Releases - Reasons for Changes in Quantities Released from Previous Year

CAS RN	Substance Name	Reasons for Changes in Quantities from Previous Year	Comments
11104-93-1	Nitrogen oxides (expressed as NO2)	No significant change (i.e. < 10%) or no change	
630-08-0	Carbon monoxide	No significant change (i.e. < 10%) or no change	
7446-09-5	Sulphur dioxide	No significant change (i.e. < 10%) or no change	
7647-01-0	Hydrochloric acid	No significant change (i.e. < 10%) or no change	
7789-75-5	Calcium fluoride	No significant change (i.e. < 10%) or no change	
NA - 09	Manganese (and its compounds)	Changes in production levels	
NA - 14	Zinc (and its compounds)	Changes in production levels	
NA - M08	Total Particulate Matter	No significant change (i.e. < 10%) or no change	
NA - M09	PM10 - Particulate Matter <= 10 Microns	No significant change (i.e. < 10%) or no change	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	No significant change (i.e. < 10%) or no change	

Disposals - Off-site Disposal (excluding Tailings and Waste Rock)

CAS RN	Substance Name	Category	Basis of Estimate	Detail Code	Quantity
7789-75-5	Calcium fluoride	Landfill	O - Engineering Estimates		59.32 tonnes

Disposals - Off-site Disposal (excluding Tailings and Waste Rock) - Total

CAS RN	Substance Name	Total - Off-site Disposals
7789-75-5	Calcium fluoride	59.32 tonnes

Disposals - Off-site Disposal (excluding Tailings and Waste Rock) - By Facilities

CAS RN	Substance Name	Category	Off-site Name	Off-site Address	Quantity
7789-75-5	Calcium fluoride	Landfill	Capital Environmental Resources Ltd.	306 Lake Ave. N., Hamilton, ON, Canada	59.32 tonnes

Disposals - Total Quantity Disposed (All Media)

CAS RN	Substance Name	Total Quantity Disposed (All Media)
7789-75-5	Calcium fluoride	59.32 tonnes

Disposals - Reasons and Comments

CAS RN	Substance Name	Reasons Why Substance Was Disposed	Reasons for Changes in Quantities from Previous Year	Comments
7647-01-0	Hydrochloric acid		No significant change (i.e. < 10%) or no change	
7789-75-5	Calcium fluoride	Pollution abatement residues	No significant change (i.e. < 10%) or no change	
NA - 09	Manganese (and its compounds)		No significant change (i.e. < 10%) or no change	
NA - 14	Zinc (and its compounds)		No significant change (i.e. < 10%) or no change	

Recycling - Reasons and Comments

CAS RN	Substance Name	Reasons Why Substance Was Recycled	Reasons for Changes in Quantities Recycled from Previous Year	Comments
7647-01-0	Hydrochloric acid		No significant change (i.e. < 10%) or no change	
7789-75-5	Calcium fluoride		No significant change (i.e. < 10%) or no change	
NA - 09	Manganese (and its compounds)		No significant change (i.e. < 10%) or no change	
NA - 14	Zinc (and its compounds)		No significant change (i.e. < 10%) or no change	

Comparison Report - Enters, Creation, Contained in Product

CAS RN	Substance Name	Is Breakdown	Category	Quantity	Last Reported Quantity	Reporting Period of Last Reported Quantity	Change	% Change
7789-75-5	Calcium fluoride	No	Enters the facility (Use)	0 tonnes	0 tonnes	2013	0	
7789-75-5	Calcium fluoride	No	Creation	59.32 tonnes	63.13 tonnes	2013	-3.81	-6.04
7789-75-5	Calcium fluoride	No	Contained in Product	0 tonnes	0 tonnes	2013	0	
630-08-0	Carbon monoxide	No	Enters the facility (Use)	0 tonnes	0 tonnes	2013	0	
630-08-0	Carbon monoxide	No	Creation	73.28 tonnes	77.99 tonnes	2013	-4.71	-6.04
7647-01-0	Hydrochloric acid	No	Enters the facility (Use)	0 tonnes	0 tonnes	2013	0	
7647-01-0	Hydrochloric acid	No	Creation	38.34 tonnes	40.81 tonnes	2013	-2.47	-6.05
7647-01-0	Hydrochloric acid	No	Contained in Product	0 tonnes	0 tonnes	2013	0	
NA - 09	Manganese (and its compounds)	No	Enters the facility (Use)	461.217 tonnes	296.925 tonnes	2013	164.292	55.33
NA - 09	Manganese (and its compounds)	No	Creation	0 tonnes	0 tonnes	2013	0	
NA - 09	Manganese (and its compounds)	No	Contained in Product	461.135 tonnes	296.876 tonnes	2013	164.259	55.33
11104-93-1	Nitrogen oxides (expressed as NO2)	No	Enters the facility (Use)	0 tonnes	0 tonnes	2013	0	
11104-93-1	Nitrogen oxides (expressed as NO2)	No	Creation	23.57 tonnes	25.08 tonnes	2013	-1.51	-6.02
NA - M09	PM10 - Particulate Matter <= 10 Microns	No	Enters the facility (Use)	0 tonnes	0 tonnes	2013	0	
NA - M09	PM10 - Particulate Matter <= 10 Microns	No	Creation	23.563 tonnes	25.097 tonnes	2013	-1.534	-6.11
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	No	Enters the facility (Use)	0 tonnes	0 tonnes	2013	0	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	No	Creation	2.592 tonnes	2.759 tonnes	2013	-0.167	-6.05
7446-09-5	Sulphur dioxide	No	Enters the facility (Use)	0 tonnes	0 tonnes	2013	0	
7446-09-5	Sulphur dioxide	No	Creation	34.39 tonnes	36.60 tonnes	2013	-2.21	-6.04
NA - M08	Total Particulate Matter	No	Enters the facility (Use)	0 tonnes	0 tonnes	2013	0	
NA - M08	Total Particulate Matter	No	Creation	27.72 tonnes	29.50 tonnes	2013	-1.78	-6.03
NA - 14	Zinc (and its compounds)	No	Enters the facility (Use)	16.000 tonnes	10.364 tonnes	2013	5.636	54.38
NA - 14	Zinc (and its compounds)	No	Creation	0 tonnes	0 tonnes	2013	0	
NA - 14	Zinc (and its compounds)	No	Contained in Product	15.997 tonnes	10.362 tonnes	2013	5.635	54.38

Comparison Report - Enters, Creation, Contained in Product : Reason(s) for Change

CAS RN	Substance Name	Reason(s) for Change	Other Reason
7789-75-5	Calcium fluoride	No reasons - quantities approximately the same	
630-08-0	Carbon monoxide	No reasons - quantities approximately the same	

CAS RN	Substance Name	Reason(s) for Change	Other Reason
7647-01-0	Hydrochloric acid	No reasons - quantities approximately the same	
NA - 09	Manganese (and its compounds)	Increase in production levels	
11104-93-1	Nitrogen oxides (expressed as NO2)	No reasons - quantities approximately the same	
NA - M09	PM10 - Particulate Matter <= 10 Microns	No reasons - quantities approximately the same	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	No reasons - quantities approximately the same	
7446-09-5	Sulphur dioxide	No reasons - quantities approximately the same	
NA - M08	Total Particulate Matter	No reasons - quantities approximately the same	
NA - 14	Zinc (and its compounds)	Increase in production levels	

Comparison Report - On-site Releases

CAS RN	Substance Name	Is Breakdown	Category	Quantity	Last Reported Quantity	Reporting Period of Last Reported Quantity	Change	% Change
630-08-0	Carbon monoxide	No	Total Releases to Air	73.28 tonnes	77.99 tonnes	2013	-4.71	-6.04
630-08-0	Carbon monoxide	No	Total Releases to Water	0 tonnes	0 tonnes	2013	0	
630-08-0	Carbon monoxide	No	Total Releases to Land	0 tonnes	0 tonnes	2013	0	
630-08-0	Carbon monoxide	No	Total Releases to All Media	0 tonnes				
7647-01-0	Hydrochloric acid	No	Total Releases to Air	38.34 tonnes	40.81 tonnes	2013	-2.47	-6.05
7647-01-0	Hydrochloric acid	No	Total Releases to Water	0 tonnes	0 tonnes	2013	0	
7647-01-0	Hydrochloric acid	No	Total Releases to Land	0 tonnes	0 tonnes	2013	0	
7647-01-0	Hydrochloric acid	No	Total Releases to All Media	0 tonnes				
NA - 09	Manganese (and its compounds)	No	Total Releases to Air	0 tonnes				
NA - 09	Manganese (and its compounds)	No	Total Releases to Water	0 tonnes				
NA - 09	Manganese (and its compounds)	No	Total Releases to Land	0 tonnes				
NA - 09	Manganese (and its compounds)	No	Total Releases to All Media	0.0818 tonnes	0.049 tonnes	2013	0.0328	66.94
11104-93-1	Nitrogen oxides (expressed as NO2)	No	Total Releases to Air	23.57 tonnes	25.08 tonnes	2013	-1.51	-6.02
11104-93-1	Nitrogen oxides (expressed as NO2)	No	Total Releases to Water	0 tonnes	0 tonnes	2013	0	
11104-93-1	Nitrogen oxides (expressed as NO2)	No	Total Releases to Land	0 tonnes	0 tonnes	2013	0	
11104-93-1	Nitrogen oxides (expressed as NO2)	No	Total Releases to All Media	0 tonnes				
NA - M09	PM10 - Particulate Matter <= 10 Microns	No	Total Releases to Air	23.563 tonnes	25.079 tonnes	2013	-1.516	-6.04
NA - M09	PM10 - Particulate Matter <= 10 Microns	No	Total Releases to Water	0 tonnes	0 tonnes	2013	0	
NA - M09	PM10 - Particulate Matter <= 10 Microns	No	Total Releases to Land	0 tonnes	0 tonnes	2013	0	
NA - M09	PM10 - Particulate Matter <= 10 Microns	No	Total Releases to All Media	0 tonnes				
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	No	Total Releases to Air	2.592 tonnes	2.759 tonnes	2013	-0.167	-6.05
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	No	Total Releases to Water	0 tonnes	0 tonnes	2013	0	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	No	Total Releases to Land	0 tonnes	0 tonnes	2013	0	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	No	Total Releases to All Media	0 tonnes				
7446-09-5	Sulphur dioxide	No	Total Releases to Air	34.39 tonnes	36.60 tonnes	2013	-2.21	-6.04
7446-09-5	Sulphur dioxide	No	Total Releases to Water	0 tonnes	0 tonnes	2013	0	
7446-09-5	Sulphur dioxide	No	Total Releases to Land	0 tonnes	0 tonnes	2013	0	
7446-09-5	Sulphur dioxide	No	Total Releases to All Media	0 tonnes				
NA - M08	Total Particulate Matter	No	Total Releases to Air	27.72 tonnes	29.50 tonnes	2013	-1.78	-6.03
NA - M08	Total Particulate Matter	No	Total Releases to Water	0 tonnes	0 tonnes	2013	0	

CAS RN	Substance Name	Is Breakdown	Category	Quantity	Last Reported Quantity	Reporting Period of Last Reported Quantity	Change	% Change
NA - M08	Total Particulate Matter	No	Total Releases to Land	0 tonnes	0 tonnes	2013	0	
NA - M08	Total Particulate Matter	No	Total Releases to All Media	0 tonnes				
NA - 14	Zinc (and its compounds)	No	Total Releases to Air	0 tonnes				
NA - 14	Zinc (and its compounds)	No	Total Releases to Water	0 tonnes				
NA - 14	Zinc (and its compounds)	No	Total Releases to Land	0 tonnes				
NA - 14	Zinc (and its compounds)	No	Total Releases to All Media	0.0028 tonnes	0.0017 tonnes	2013	0.0011	64.71

Comparison Report - On-site Releases - Reason(s) for Change

CAS RN	Substance Name	Reason(s) for Change	Other Reason
630-08-0	Carbon monoxide	No reasons - quantities approximately the same	
7647-01-0	Hydrochloric acid	No reasons - quantities approximately the same	
NA - 09	Manganese (and its compounds)	Increase in production levels	
11104-93-1	Nitrogen oxides (expressed as NO2)	No reasons - quantities approximately the same	
NA - M09	PM10 - Particulate Matter <= 10 Microns	No reasons - quantities approximately the same	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	No reasons - quantities approximately the same	
7446-09-5	Sulphur dioxide	No reasons - quantities approximately the same	
NA - M08	Total Particulate Matter	No reasons - quantities approximately the same	
NA - 14	Zinc (and its compounds)	Increase in production levels	

Comparison Report - Disposals On-site, Off-site and Tailings and Waste Rock

CAS RN	Substance Name	Is Breakdown	Category	Quantity	Last Reported Quantity	Reporting Period of Last Reported Quantity	Change	% Change
7789-75-5	Calcium fluoride	No	Total On-site Disposals	0 tonnes	0 tonnes	2013	0	
7789-75-5	Calcium fluoride	No	Total Off-site Disposals	59.32 tonnes	63.13 tonnes	2013	-3.81	-6.04
7789-75-5	Calcium fluoride	No	Total Off-site transfer for treatment Prior to Final Disposal	0 tonnes	0 tonnes	2013	0	
7789-75-5	Calcium fluoride	No	Total On-site Disposal of Tailings and Waste Rock	0 tonnes	0 tonnes	2013	0	
7789-75-5	Calcium fluoride	No	Total Off-site Disposal of Tailings and Waste Rock	0 tonnes	0 tonnes	2013	0	

Comparison Report - Disposals On-site, Off-site and Tailings and Waste Rock - Reason(s) for Change

CAS RN	Substance Name	Reason(s) for Change	Other Reason
7789-75-5	Calcium fluoride	No reasons - quantities approximately the same	

Pollution Prevention

Does the facility have a documented pollution prevention plan?	No
Did the facility complete any pollution prevention activities in the current NPRI reporting year	No

Progress on TRA Plan - Objectives

CAS RN	Substance Name	Objectives
7789-75-5	Calcium fluoride	Hanson Brick Ltd. will continue to explore options that reduce its emissions of calcium fluoride by implementing on-line monitoring of the chemicals and investigation of a new style of kiln roof.
630-08-0	Carbon monoxide	Hanson Brick Ltd. produces fired clay brick primarily for the Greater Toronto Area using locally sourced raw materials. Carbon Monoxide is created in the manufacturing process. Hanson Brick Ltd. will continue to control the emissions on a unit production basis and examine means to reduce emissions in the future.
7647-01-0	Hydrochloric acid	Hanson Brick Ltd. will continue to explore options that reduce its emissions of HCL by implementing on-line monitoring of the chemicals and investigation of a new style of kiln roof.
NA - 09	Manganese (and its compounds)	Hanson Brick Burlington will reduce the release to land of Manganese by implementation of up to 13 options identified in this plan. This will reduce the release to land by 100%.
11104-93-1	Nitrogen oxides (expressed as NO2)	Hanson Brick Ltd. produces fired clay brick primarily for the Greater Toronto Area using locally sourced raw materials. Nitrous Oxides are created in the manufacturing process. Hanson Brick Ltd. will continue to control the emissions on a unit production basis and examine means to reduce emissions in the future.
	PM10 -	

CAS RN	Substance Name	Objectives
NA - M09	Particulate Matter <= 10 Microns	Hanson Brick Ltd. will continue to operate the plants in full compliance with Environmental Standards and ECA-Air issued in 2012. This plan will determine the technical and economic feasibility of options to reduce the emissions and recover the compound.
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Hanson Brick Ltd. will continue to operate the plants in full compliance with Environmental Standards and ECA-Air issued in 2012. This plan will determine the technical and economic feasibility of options to reduce the emissions and recover the compound.
7446-09-5	Sulphur dioxide	Hanson Brick Ltd. will continue to explore options that reduce its emissions of sulphur dioxide by implementing on-line monitoring of the chemicals and investigation of a new style of kiln roof.
NA - M08	Total Particulate Matter	Hanson Brick Ltd. will continue to operate the plants in full compliance with Environmental Standards and ECA-Air issued in 2012. This plan will determine the technical and economic feasibility of options to reduce the emissions and recover the compound.
NA - 14	Zinc (and its compounds)	Hanson Brick Burlington will reduce the release to land of Zinc by implementation of up to 13 options identified in this plan. This will reduce the release to land by 100%.

Progress on TRA Plan - Use Targets

CAS RN	Substance Name	Quantity	Years	Description of Target
7789-75-5	Calcium fluoride	No quantity target	No timeline target	
630-08-0	Carbon monoxide	No quantity target	No timeline target	
7647-01-0	Hydrochloric acid	No quantity target	No timeline target	
NA - 09	Manganese (and its compounds)	25.39 tonnes	1	Hanson Brick will reduce the use of manganese on a unit production basis and end releases to land.
11104-93-1	Nitrogen oxides (expressed as NO2)	No quantity target	No timeline target	Hanson Brick Ltd. will explore opportunities to reduce NOx.
NA - M09	PM10 - Particulate Matter <= 10 Microns	No quantity target	No timeline target	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	No quantity target	No timeline target	
7446-09-5	Sulphur dioxide	No quantity target	No timeline target	
NA - M08	Total Particulate Matter	No quantity target	No timeline target	
NA - 14	Zinc (and its compounds)	4.20 tonnes	1	Hanson Brick will reduce the use of plan compounds on a unit production basis and end releases to land

Progress on TRA Plan - Creation Targets

CAS RN	Substance Name	Quantity	Years	Description of Target
7789-75-5	Calcium fluoride	No quantity target	3	Hanson Brick will implement continuous monitoring of hydrogen fluoride both within and outside the plant structures as a means to reduce the release of Calcium fluoride.
630-08-0	Carbon monoxide	No quantity target	No timeline target	Hanson Brick Ltd. will explore opportunities to reduce CO.
7647-01-0	Hydrochloric acid	No quantity target	No timeline target	
NA - 09	Manganese (and its compounds)	No quantity target	No timeline target	
11104-93-1	Nitrogen oxides (expressed as NO2)	No quantity target	No timeline target	Hanson Brick Ltd. will explore opportunities to reduce NOx.
NA - M09	PM10 - Particulate Matter <= 10 Microns	39.02 kg	2	Hanson Brick Ltd. will increase the inspection of its dust collection units as a means to minimize incidents of filter media failure and subsequent leakage.
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	4.29 kg	2	Hanson Brick Ltd. will increase the inspection of its dust collection units as a means to minimize incidents of filter media failure and subsequent leakage.
7446-09-5	Sulphur dioxide	No quantity target	No timeline target	.
NA - M08	Total Particulate Matter	45.9 kg	2	Hanson Brick Ltd. will increase the inspection of its dust collection units as a means to minimize incidents of filter media failure and subsequent leakage
NA - 14	Zinc (and its compounds)	No quantity target	No timeline target	

Progress on TRA Plan - Toxic Reduction Options Implemented

CAS RN	Substance Name	Activity	Steps that were taken in the reporting period to implement the toxic reduction option	Public summary of the description of the steps	Comparison of the steps that were described in the plan for implementation with the actual steps taken during the reporting period	Public summary of the comparison of the steps
7789-75-5	Calcium fluoride	Other	No steps were taken during 2014 to implement the toxic reduction option because the plans were just completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.

CAS RN	Substance Name	Activity	Steps that were taken in the reporting period to implement the toxic reduction option	Public summary of the description of the steps	Comparison of the steps that were described in the plan for implementation with the actual steps taken during the reporting period	Public summary of the comparison of the steps
7789-75-5	Calcium fluoride	Other	No steps were taken during 2014 to implement the toxic reduction option because the plans were just completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.
7647-01-0	Hydrochloric acid	Other	No steps were taken during 2014 to implement the toxic reduction option because the plans were just completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.
NA - 09	Manganese (and its compounds)	Other	No steps were taken during 2014 to implement the toxic reduction option because the plans were just completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.
NA - 09	Manganese (and its compounds)	Other	No steps were taken during 2014 to implement the toxic reduction option because the plans were just completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.
NA - 09	Manganese (and its compounds)	Modified design or composition	No steps were taken during 2014 to implement the toxic reduction option because the plans were just completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.
NA - 09	Manganese (and its compounds)	Other	No steps were taken during 2014 to implement the toxic reduction option because the plans were just completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.
NA - M09	PM10 - Particulate Matter <= 10 Microns	Modified equipment, layout or piping	No steps were taken during 2014 to implement the toxic reduction option because the plans were just completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.
NA - M09	PM10 - Particulate Matter <= 10 Microns	Implemented inspection or monitoring program of potential spill or leak sources	No steps were taken during 2014 to implement the toxic reduction option because the plans were just completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Modified equipment, layout or piping	No steps were taken during 2014 to implement the toxic reduction option because the plans were just completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Implemented inspection or monitoring program of potential spill or leak sources	No steps were taken during 2014 to implement the toxic reduction option because the plans were just completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.
7446-09-5	Sulphur dioxide	Other	No steps were taken during 2014 to implement the toxic reduction option because the plans were just completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.
NA - M08	Total Particulate Matter	Modified equipment, layout or piping	No steps were taken during 2014 to implement the toxic reduction option because the plans were just completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.
NA - M08	Total Particulate Matter	Implemented inspection or monitoring program of potential spill or leak sources	No steps were taken during 2014 to implement the toxic reduction option because the plans were just completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.
NA - 14	Zinc (and its compounds)	Other	No steps were taken during 2014 to implement the toxic reduction option because the plans were just completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.
NA - 14	Zinc (and its compounds)	Other	No steps were taken during 2014 to implement the toxic reduction option because the plans were just completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.
NA - 14	Zinc (and its compounds)	Modified design or composition	No steps were taken during 2014 to implement the toxic reduction option because the plans were just completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.
NA - 14	Zinc (and its compounds)	Other	No steps were taken during 2014 to implement the toxic reduction option because the plans were just completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.	No steps have been taken yet as the TRA Plans were completed in 2014.

Progress on TRA Plan - Reductions due to Options Implemented - Equipment or process modifications

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Modified equipment, layout or piping	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Modified equipment, layout or piping	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Modified equipment, layout or piping	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Modified equipment, layout or piping	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Modified equipment, layout or piping	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Modified equipment, layout or piping	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Modified equipment, layout or piping	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Modified equipment, layout or piping	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Modified equipment, layout or piping	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Modified equipment, layout or piping	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Modified equipment, layout or piping	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Modified equipment, layout or piping	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Modified equipment, layout or piping	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Modified equipment, layout or piping	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Modified equipment, layout or piping	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Modified equipment, layout or piping	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Modified equipment, layout or piping	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Modified equipment, layout or piping	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M08	Total Particulate Matter	Modified equipment, layout or piping	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
NA - M08	Total Particulate Matter	Modified equipment, layout or piping	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M08	Total Particulate Matter	Modified equipment, layout or piping	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M08	Total Particulate Matter	Modified equipment, layout or piping	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M08	Total Particulate Matter	Modified equipment, layout or piping	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M08	Total Particulate Matter	Modified equipment, layout or piping	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
NA - M08	Total Particulate Matter	Modified equipment, layout or piping	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M08	Total Particulate Matter	Modified equipment, layout or piping	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M08	Total Particulate Matter	Modified equipment, layout or piping	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount

Progress on TRA Plan - Reductions due to Options Implemented - On-site reuse, recycling or recovery

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount

Progress on TRA Plan - Reductions due to Options Implemented - Product design or reformulation

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
NA - 09	Manganese (and its compounds)	Modified design or composition	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Modified design or composition	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Modified design or composition	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Modified design or composition	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Modified design or composition	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Modified design or composition	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
NA - 09	Manganese (and its compounds)	Modified design or composition	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Modified design or composition	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Modified design or composition	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Modified design or composition	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Modified design or composition	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Modified design or composition	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Modified design or composition	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Modified design or composition	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Modified design or composition	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
NA - 14	Zinc (and its compounds)	Modified design or composition	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Modified design or composition	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Modified design or composition	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount

Progress on TRA Plan - Reductions due to Options Implemented - Spill or leak prevention

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
7789-75-5	Calcium fluoride	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
7789-75-5	Calcium fluoride	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
7789-75-5	Calcium fluoride	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
7789-75-5	Calcium fluoride	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
7789-75-5	Calcium fluoride	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
7789-75-5	Calcium fluoride	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
7789-75-5	Calcium fluoride	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
7789-75-5	Calcium fluoride	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
7789-75-5	Calcium fluoride	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
7647-01-0	Hydrochloric acid	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
7647-01-0	Hydrochloric acid	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
7647-01-0	Hydrochloric acid	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
7647-01-0	Hydrochloric acid	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
7647-01-0	Hydrochloric acid	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
7647-01-0	Hydrochloric acid	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
7647-01-0	Hydrochloric acid	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
7647-01-0	Hydrochloric acid	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
7647-01-0	Hydrochloric acid	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M09	PM10 - Particulate Matter <= 10 Microns	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
7446-09-5	Sulphur dioxide	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
7446-09-5	Sulphur dioxide	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
7446-09-5	Sulphur dioxide	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
7446-09-5	Sulphur dioxide	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
7446-09-5	Sulphur dioxide	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
7446-09-5	Sulphur dioxide	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
7446-09-5	Sulphur dioxide	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
7446-09-5	Sulphur dioxide	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
7446-09-5	Sulphur dioxide	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M08	Total Particulate Matter	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M08	Total Particulate Matter	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M08	Total Particulate Matter	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M08	Total Particulate Matter	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M08	Total Particulate Matter	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M08	Total Particulate Matter	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
NA - M08	Total Particulate Matter	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M08	Total Particulate Matter	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - M08	Total Particulate Matter	Implemented inspection or monitoring program of potential spill or leak sources	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount

Progress on TRA Plan - Reductions due to Options Implemented - Good operator practice or training

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
7789-75-5	Calcium fluoride	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
7789-75-5	Calcium fluoride	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
7789-75-5	Calcium fluoride	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
7789-75-5	Calcium fluoride	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
7789-75-5	Calcium fluoride	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
7789-75-5	Calcium fluoride	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
7789-75-5	Calcium fluoride	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
7789-75-5	Calcium fluoride	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
7789-75-5	Calcium fluoride	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 09	Manganese (and its compounds)	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the steps described:	No Amount
NA - 14	Zinc (and its compounds)	Other	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the steps described:	No Amount

Progress on TRA Plan - Additional Actions

CAS RN	Substance Name	Were there any additional actions outside the plan taken during the reporting period to reduce the use and/or creation of the substance?	Describe any additional actions that were taken during the reporting period to achieve the plan's objectives	Provide a public summary of the description of the additional action taken
7789-75-5	Calcium fluoride	No		
630-08-0	Carbon monoxide	No		
7647-01-0	Hydrochloric acid	No		
NA - 09	Manganese (and its compounds)	No		
11104-93-1	Nitrogen oxides (expressed as NO2)	No		
NA - M09	PM10 - Particulate Matter <= 10 Microns	No		
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	No		
7446-09-5	Sulphur dioxide	No		
NA - M08	Total Particulate Matter	No		
NA - 14	Zinc (and its compounds)	No		

Progress on TRA Plan - Reductions due to additional actions taken

CAS RN	Substance Name	Reductions due to additional actions taken	Quantity
7789-75-5	Calcium fluoride	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the additional actions.	
7789-75-5	Calcium fluoride	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the additional actions.	
7789-75-5	Calcium fluoride	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the additional actions.	
7789-75-5	Calcium fluoride	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the additional actions.	
7789-75-5	Calcium fluoride	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the additional actions.	
7789-75-5	Calcium fluoride	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to additional actions.	
7789-75-5	Calcium fluoride	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
7789-75-5	Calcium fluoride	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
7789-75-5	Calcium fluoride	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the additional actions.	
630-08-0	Carbon monoxide	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the additional actions.	
630-08-0	Carbon monoxide	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the additional actions.	
630-08-0	Carbon monoxide	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the additional actions.	

CAS RN	Substance Name	Reductions due to additional actions taken	Quantity
630-08-0	Carbon monoxide	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the additional actions.	
630-08-0	Carbon monoxide	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the additional actions.	
630-08-0	Carbon monoxide	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to additional actions.	
630-08-0	Carbon monoxide	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
630-08-0	Carbon monoxide	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
630-08-0	Carbon monoxide	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the additional actions.	
7647-01-0	Hydrochloric acid	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the additional actions.	
7647-01-0	Hydrochloric acid	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the additional actions.	
7647-01-0	Hydrochloric acid	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the additional actions.	
7647-01-0	Hydrochloric acid	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the additional actions.	
7647-01-0	Hydrochloric acid	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the additional actions.	
7647-01-0	Hydrochloric acid	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to additional actions.	
7647-01-0	Hydrochloric acid	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
7647-01-0	Hydrochloric acid	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
7647-01-0	Hydrochloric acid	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the additional actions.	
NA - 09	Manganese (and its compounds)	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - 09	Manganese (and its compounds)	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - 09	Manganese (and its compounds)	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the additional actions.	
NA - 09	Manganese (and its compounds)	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - 09	Manganese (and its compounds)	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - 09	Manganese (and its compounds)	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to additional actions.	
NA - 09	Manganese (and its compounds)	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
NA - 09	Manganese (and its compounds)	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
NA - 09	Manganese (and its compounds)	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the additional actions.	
11104-93-1	Nitrogen oxides (expressed as NO2)	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the additional actions.	
11104-93-1	Nitrogen oxides (expressed as NO2)	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the additional actions.	
11104-93-1	Nitrogen oxides (expressed as NO2)	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the additional actions.	
11104-93-1	Nitrogen oxides (expressed as NO2)	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the additional actions.	
11104-93-1	Nitrogen oxides (expressed as NO2)	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the additional actions.	
11104-93-1	Nitrogen oxides (expressed as NO2)	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to additional actions.	
11104-93-1	Nitrogen oxides (expressed as NO2)	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
11104-93-1	Nitrogen oxides (expressed as NO2)	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
11104-93-1	Nitrogen oxides (expressed as NO2)	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the additional actions.	
NA - M09	PM10 - Particulate Matter <= 10 Microns	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - M09	PM10 - Particulate Matter <= 10 Microns	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - M09	PM10 - Particulate Matter <= 10 Microns	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the additional actions.	
NA - M09	PM10 - Particulate Matter <= 10 Microns	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the additional actions.	

CAS RN	Substance Name	Reductions due to additional actions taken	Quantity
NA - M09	PM10 - Particulate Matter <= 10 Microns	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - M09	PM10 - Particulate Matter <= 10 Microns	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to additional actions.	
NA - M09	PM10 - Particulate Matter <= 10 Microns	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
NA - M09	PM10 - Particulate Matter <= 10 Microns	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
NA - M09	PM10 - Particulate Matter <= 10 Microns	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the additional actions.	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the additional actions.	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to additional actions.	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the additional actions.	
7446-09-5	Sulphur dioxide	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the additional actions.	
7446-09-5	Sulphur dioxide	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the additional actions.	
7446-09-5	Sulphur dioxide	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the additional actions.	
7446-09-5	Sulphur dioxide	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the additional actions.	
7446-09-5	Sulphur dioxide	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the additional actions.	
7446-09-5	Sulphur dioxide	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to additional actions.	
7446-09-5	Sulphur dioxide	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
7446-09-5	Sulphur dioxide	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
7446-09-5	Sulphur dioxide	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the additional actions.	
NA - M08	Total Particulate Matter	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - M08	Total Particulate Matter	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - M08	Total Particulate Matter	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the additional actions.	
NA - M08	Total Particulate Matter	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - M08	Total Particulate Matter	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - M08	Total Particulate Matter	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to additional actions.	
NA - M08	Total Particulate Matter	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
NA - M08	Total Particulate Matter	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
NA - M08	Total Particulate Matter	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the additional actions.	
NA - 14	Zinc (and its compounds)	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - 14	Zinc (and its compounds)	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - 14	Zinc (and its compounds)	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the additional actions.	
NA - 14	Zinc (and its compounds)	The amount of reduction in **release to air** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - 14	Zinc (and its compounds)	The amount of reduction in **release to water** of the substance at the facility during the reporting period that resulted due to the additional actions.	

CAS RN	Substance Name	Reductions due to additional actions taken	Quantity
NA - 14	Zinc (and its compounds)	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to additional actions.	
NA - 14	Zinc (and its compounds)	The amount of reduction in the substance **disposed on-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
NA - 14	Zinc (and its compounds)	The amount of reduction in the substance **disposed off-site** (including tailings and waste rocks) at the facility during the reporting period that resulted due to the additional actions.	
NA - 14	Zinc (and its compounds)	The amount of reduction in the substance **recycled off-site** at the facility during the reporting period that resulted due to the additional actions.	

Progress on TRA Plan - Amendments

CAS RN	Substance Name	Were any amendments made to the toxic substance reduction plan during the reporting period	Description any amendments that were made to the toxic substance reduction plan during the reporting period	Provide a public summary of the description of any amendments that were made to the toxic substance reduction plan during the reporting period
7789-75-5	Calcium fluoride	No		
630-08-0	Carbon monoxide	No		
7647-01-0	Hydrochloric acid	No		
NA - 09	Manganese (and its compounds)	No		
11104-93-1	Nitrogen oxides (expressed as NO2)	No		
NA - M09	PM10 - Particulate Matter <= 10 Microns	No		
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns	No		
7446-09-5	Sulphur dioxide	No		
NA - M08	Total Particulate Matter	No		
NA - 14	Zinc (and its compounds)	No		

Report Submission and Electronic Certification

NPRI - Electronic Statement of Certification

Specify the language of correspondence

English

Comments (optional)

I hereby certify that I have exercised due diligence to ensure that the submitted information is true and complete. The amounts and values for the facility(ies) identified below are accurate, based on reasonable estimates using available data. The data for the facility(ies) that I represent are hereby submitted to the programs identified below using the Single Window Reporting Application.

I also acknowledge that the data will be made public.

Note: Only the person identified as the Certifying Official or the authorized delegate should submit the report(s) identified below.

Company Name

Hanson Brick

Certifying Official (or authorized delegate)

Jack Hewitt

Report Submitted by

Shane Egan

I, the Certifying Official or authorized delegate, agree with the statements above and acknowledge that by pressing the "Submit Report(s)" button, I am electronically certifying and submitting the facility report(s) for the identified company to its affiliated programs.

ON MOE TRA - Electronic Certification Statement

Annual Report Certification Statement

As of 01/06/2015, I, Shane Egan, 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 that Act.

TRA Substance List

CAS RN	Substance Name
7789-75-5	Calcium fluoride
630-08-0	Carbon monoxide
7647-01-0	Hydrochloric acid
NA - 09	Manganese (and its compounds)
11104-93-1	Nitrogen oxides (expressed as NO2)
NA - M09	PM10 - Particulate Matter <= 10 Microns
NA - M10	PM2.5 - Particulate Matter <= 2.5 Microns
7446-09-5	Sulphur dioxide
NA - M08	Total Particulate Matter
NA - 14	Zinc (and its compounds)

Company Name

Hanson Brick

Highest Ranking Employee

Shane Egan

Report Submitted by

Shane Egan

Website address

I, the highest ranking employee, agree with the certification statement(s) above and acknowledge that by checking the box I am electronically signing the statement(s). I also acknowledge that by pressing the 'Submit Report(s)' button I am submitting the facility record(s)/report(s) for the identified facility to the Director under the Toxics Reduction Act, 2009. I also acknowledge that the Toxics Reduction Act, 2009 and Ontario Regulation 455/09 provide the authority to the Director under the Act to make certain information as specified in subsection 27(5) of Ontario Regulation 455/09 available to the public.

Submitted Report

Period	Submission Date	Facility Name	Province	City	Programs
2014	01/06/2015	Hanson Brick - Burlington	Ontario	Burlington	NPRI,ON MOE TRA

Note: If there is a change in the contact information for the facility, a change in the owner or operator of the facility, if operations at the facility are terminated, or if information submitted for any previous year was mistaken or inaccurate, please update this information through SWIM or by contacting the National Pollutant Release Inventory directly.

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