Report Preview

Report Details

Report Year	2017
Report Type:	NPRI,ON MOE TRA
Report Status:	Submitted
Modified Date/Time:	29/05/2018 11:13 AM

Company and Facility Details

Company Name:	Viasystems Toronto, Inc.
Business Number:	122456379
Mailing Address:	Delivery Mode: GeneralDelivery Address Line 1: 8150 Sheppard Avenue East City, Province/Territory, Postal Code: Toronto Ontario M1B5K2 Country: Canada
Facility Name:	Sheppard Facility
NAICS Code:	334410
NPRI ID:	11606
Physical Address:	Address Line 1: 8150 Sheppard Avenue East City, Province/Territory, Postal Code: Toronto Ontario M1B5K2 Country: Canada Latitude: 43.8031 Longitude: -79.1952 UTM Zone: 17 UTM Easting: 645022 UTM Northing: 4851615

Parent Companies

Company Name:	Sheppard Facility
Mailing Address:	Address Line 1: City, Province/Territory, Postal Code: None Country: None

Permits

Number or Permit Number:	8991-6N5LSA
Government Department, Agency, or Program Name:	Ministry of the Environment, Cert. of Air Approval
Number or Permit Number:	ON0761503
Government Department, Agency, or Program Name:	Ministry of the Environment, Regulation 347
Number or Permit Number:	539945

Government Department, Agency, or Program Name:	CEPA EIHW Export Notice Number (2016 - 2017)
Number or Permit Number:	701067
Government Department, Agency, or Program Name:	CEPA EIHW Export Notice Number (2017 - 2018)

Contacts Details

Contact Type	Technical Contact, Certifying Official, Company Coordinator, Person who prepared the report, Person who coordinated the preparation of the Toxics Reduction Plan, Public Contact
Name:	Mark Scruton
Position:	Dir. of EHSS of AMII
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Contact Type	Highest Ranking Employee
Name:	Jon Pereira
Position:	VP Operations of AMII
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Email:	Jon.Pereira@ttm.com
Mailing Address:	Delivery Mode: GeneralDelivery Address Line 1: 8150 Sheppard Avenue East City, Province/Territory, Postal Code: Toronto Ontario M1B 5K2 Country: Canada

General Information

Number of employees:	583
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:	No
Did the facility report under other environmental regulations or permits:	Yes
Is the facility required to report one or more NPRI Part 4 substances (Criteria Air Contaminants):	No
General Comments for Facility:	PWB manufacturing

Substance List

CAS RN	Substance Name	Releases	Releases (Speciated VOCs)	Disposals	Recycling	Unit
NA - 16	Ammonia (total)	16.1700	N/A	0.9660	25.8200	tonnes
NA - 06	Copper (and its compounds)	N/A	N/A	9.6770	130.0180	tonnes
50-00-0	Formaldehyde	0.0300	N/A	0.0510	N/A	tonnes

CAS RN	Substance Name	Releases	Releases (Speciated VOCs)	Disposals	Recycling	Unit
7647-01-0	Hydrochloric acid	0.8980	N/A	0.0049	63.7400	tonnes
NA - 08	Lead (and its compounds)	0.0200	N/A	5.8140	298.3140	kg
7697-37-2	Nitric acid	1.3940	N/A	19.6375	N/A	tonnes
7664-93-9	Sulphuric acid	0.0002	N/A	25.4000	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
NA - 16	Ammonia (total)	Yes	Yes		No
NA - 06	Copper (and its compounds)	Yes	Yes		No
50-00-0	Formaldehyde	Yes	Yes		No
7647-01-0	Hydrochloric acid	Yes	Yes		No
NA - 08	Lead (and its compounds)	Yes	Yes		No
7697-37-2	Nitric acid	Yes	Yes		No
7664-93-9	Sulphuric acid	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
NA - 16	Ammonia (total)	Yes	No	No
NA - 06	Copper (and its compounds)	No	No	No
50-00-0	Formaldehyde	Yes	Yes	No
7647-01-0	Hydrochloric acid	Yes	Yes	No
NA - 08	Lead (and its compounds)	Yes	No	No
7697-37-2	Nitric acid	Yes	No	No
7664-93-9	Sulphuric acid	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
NA - 16	Ammonia (total)	Yes	No	Yes
NA - 06	Copper (and its compounds)	Yes	No	Yes
50-00-0	Formaldehyde	Yes	No	No
7647-01-0	Hydrochloric acid	Yes	No	Yes
NA - 08	Lead (and its compounds)	Yes	No	Yes
7697-37-2	Nitric acid	Yes	No	No
7664-93-9	Sulphuric acid	Yes	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
NA - 16	Ammonia (total)		As a reactant	As a physical or chemical processing aid
NA - 06	Copper (and its compounds)		As a reactant As an article component	
50-00-0	Formaldehyde		As a reactant	As a physical or chemical processing aid
7647-01-0	Hydrochloric acid		As a reactant	As a physical or chemical processing aid
NA - 08	Lead (and its compounds)		As a reactant As an article component	
7697-37-2	Nitric acid		As a reactant	As a physical or chemical processing aid
7664-93-9	Sulphuric acid		As a reactant	As a physical or chemical processing aid

TRA Quantifications

CAS RN	Substance Name	Use, Creation, Contained in Product	Quantity	Use ranges for public reporting
NA - 16	Ammonia (total)	Use	42.95 tonnes	Yes
NA - 16	Ammonia (total)	Creation	0 tonnes	Yes
NA - 16	Ammonia (total)	Contained in Product	0 tonnes	Yes
NA - 06	Copper (and its compounds)	Use	164.757 tonnes	Yes
NA - 06	Copper (and its compounds)	Creation	0 tonnes	Yes
NA - 06	Copper (and its compounds)	Contained in Product	25.062 tonnes	Yes
50-00-0	Formaldehyde	Use	19.489 tonnes	Yes
50-00-0	Formaldehyde	Creation	0 tonnes	Yes
50-00-0	Formaldehyde	Contained in Product	0 tonnes	Yes
7647-01-0	Hydrochloric acid	Use	90.73 tonnes	Yes
7647-01-0	Hydrochloric acid	Creation	0 tonnes	Yes
7647-01-0	Hydrochloric acid	Contained in Product	0 tonnes	Yes
NA - 08	Lead (and its compounds)	Use	334.842 kg	Yes
NA - 08	Lead (and its compounds)	Creation	0 kg	Yes
NA - 08	Lead (and its compounds)	Contained in Product	30.694 kg	Yes
7697-37-2	Nitric acid	Use	34.27 tonnes	Yes
7697-37-2	Nitric acid	Creation	0 tonnes	Yes
7697-37-2	Nitric acid	Contained in Product	0 tonnes	Yes
7664-93-9	Sulphuric acid	Use	112.22 tonnes	Yes
7664-93-9	Sulphuric acid	Creation	0 tonnes	Yes
7664-93-9	Sulphuric acid	Contained in Product	0 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
NA - 16	Ammonia (total)					No
NA - 06	Copper (and its compounds)					No
50-00-0	Formaldehyde					No
7647-01-0	Hydrochloric acid					No
NA - 08	Lead (and its compounds)					No
7697-37-2	Nitric acid					No
7664-93-9	Sulphuric acid					No

On-site Releases - Releases to air

CAS RN	Substance Name	Category	Basis of Estimate	Detail Code	Quantity
NA - 16	Ammonia (total)	Stack or Point Releases	O - Engineering Estimates		16.17 tonnes
NA - 08	Lead (and its compounds)	Stack or Point Releases	O - Engineering Estimates		0.020 kg
7697-37-2	Nitric acid	Stack or Point Releases	O - Engineering Estimates		1.394 tonnes

On-site Releases - Releases to air - Total

CAS RN	Substance Name	Total - Releases to Air
NA - 16	Ammonia (total)	16.17 tonnes
NA - 08	Lead (and its compounds)	0.020 kg
7697-37-2	Nitric acid	1.394 tonnes

Total Quantity Released (All Media)

CAS RN	Substance Name	Category	Basis of Estimate	Detail Code	Quantity
50-00-0	Formaldehyde	Total Quantity Released	O - Engineering Estimates		0.030 tonnes
7647-01-0	Hydrochloric acid	Total Quantity Released	O - Engineering Estimates		0.898 tonnes
7664-93-9	Sulphuric acid	Total Quantity Released	O - Engineering Estimates		0.0002 tonnes

On-site Releases - Total

CAS RN	Substance Name	Total releases
NA - 16	Ammonia (total)	16.17 tonnes
NA - 08	Lead (and its compounds)	0.020 kg
7697-37-2	Nitric acid	1.394 tonnes

On-site Releases - Quarterly Breakdown of Annual Releases

CAS RN	Substance Name	Quarter 1	Quarter 2	Quarter 3	Quarter 4
NA - 16	Ammonia (total)	25	25	25	25
50-00-0	Formaldehyde	25	25	25	25
7647-01-0	Hydrochloric acid	25	25	25	25
NA - 08	Lead (and its compounds)	25	25	25	25
7697-37-2	Nitric acid	25	25	25	25
7664-93-9	Sulphuric acid	25	25	25	25

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
50-00-0	Formaldehyde	No significant change (i.e. < 10%) or no change	
7647-01-0	Hydrochloric acid	No significant change (i.e. < 10%) or no change	Slightly more acid released due to higher DES N. rest are VP based.
7664-93-9	Sulphuric acid	No significant change (i.e. < 10%) or no change	
7697-37-2	Nitric acid	Other (specify in On-site Releases comment field)	Changed Ni Nitric stripper formulation from 30& to 41% w/w
NA - 06	Copper (and its compounds)	Other (specify in On-site Releases comment field)	Copper not released to air
NA - 08	Lead (and its compounds)	No significant change (i.e. < 10%) or no change	
NA - 16	Ammonia (total)	No significant change (i.e. < 10%) or no change	Less Ammonium Hydroxide used to adjust pH of etcher.

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

CAS RN	Substance Name	Category	Basis of Estimate	Detail Code	Quantity
NA - 16	Ammonia (total)	Chemical Treatment	O - Engineering Estimates		0.781 tonnes
NA - 16	Ammonia (total)	Municipal Sewage Treatment Plant	O - Engineering Estimates		0.185 tonnes
NA - 06	Copper (and its compounds)	Chemical Treatment	O - Engineering Estimates		9.591 tonnes
NA - 06	Copper (and its compounds)	Municipal Sewage Treatment Plant	O - Engineering Estimates		0.086 tonnes
50-00-0	Formaldehyde	Municipal Sewage Treatment Plant	O - Engineering Estimates		0.051 tonnes
7647-01-0	Hydrochloric acid	Chemical Treatment	O - Engineering Estimates		0.0049 tonnes
NA - 08	Lead (and its compounds)	Chemical Treatment	O - Engineering Estimates		5.2908 kg
NA - 08	Lead (and its compounds)	Municipal Sewage Treatment Plant	O - Engineering Estimates		0.5232 kg
7697-37-2	Nitric acid	Chemical Treatment	O - Engineering Estimates		19.6375 tonnes
7664-93-9	Sulphuric acid	Chemical Treatment	O - Engineering Estimates		25.40 tonnes

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

CAS RN	Substance Name	Total - Treatment Prior to Final Disposal
NA - 16	Ammonia (total)	0.966 tonnes
NA - 06	Copper (and its compounds)	9.677 tonnes
50-00-0	Formaldehyde	0.051 tonnes
7647-01-0	Hydrochloric acid	0.0049 tonnes
NA - 08	Lead (and its compounds)	5.8140 kg
7697-37-2	Nitric acid	19.6375 tonnes
7664-93-9	Sulphuric acid	25.40 tonnes

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

CAS RN	Substance Name	Category	Off-site Name	Off-site Address	Quantity
50-00-0	Formaldehyde	Municipal Sewage Treatment Plant	Highland Creek Water Treatment Plant	1160 Highland Creek W., Toronto, ON, Canada	0.051 tonnes
7647-01-0	Hydrochloric acid	Chemical Treatment	Detox Environmental Ltd.	322 Bennett, Bowmanville, ON, Canada	0.0049 tonnes
7647-01-0	Hydrochloric acid	Chemical Treatment	Sure Horizon Environmental	40 Advance Blvd., Berampton, ON, L6T 4J4, Canada	
7664-93-9	Sulphuric acid	Chemical Treatment	Detox Environmental Ltd.	322 Bennett, Bowmanville, ON, Canada	15.10 tonnes

CAS RN	Substance Name	Category	Off-site Name	Off-site Address	Quantity
7664-93-9	Sulphuric acid	Chemical Treatment	Sure Horizon Environmental	40 Advance Blvd., Berampton, ON, L6T 4J4, Canada	10.30 tonnes
7697-37-2	Nitric acid	Chemical Treatment	Detox Environmental Ltd.	322 Bennett, Bowmanville, ON, Canada	0.0044 tonnes
7697-37-2	Nitric acid	Chemical Treatment	Sure Horizon Environmental	40 Advance Blvd., Berampton, ON, L6T 4J4, Canada	19.6331 tonnes
NA - 06	Copper (and its compounds)	Chemical Treatment	Detox Environmental Ltd.	322 Bennett, Bowmanville, ON, Canada	8.431 tonnes
NA - 06	Copper (and its compounds)	Chemical Treatment	Sure Horizon Environmental	40 Advance Blvd., Berampton, ON, L6T 4J4, Canada	1.160 tonnes
NA - 06	Copper (and its compounds)	Chemical Treatment	Highland Creek Water Treatment Plant	1160 Highland Creek W., Toronto, ON, Canada	
NA - 06	Copper (and its compounds)	Municipal Sewage Treatment Plant	Highland Creek Water Treatment Plant	1160 Highland Creek W., Toronto, ON, Canada	0.086 tonnes
NA - 08	Lead (and its compounds)	Chemical Treatment	Detox Environmental Ltd.	322 Bennett, Bowmanville, ON, Canada	5.2908 kg
NA - 08	Lead (and its compounds)	Chemical Treatment	Highland Creek Water Treatment Plant	1160 Highland Creek W., Toronto, ON, Canada	
NA - 08	Lead (and its compounds)	Municipal Sewage Treatment Plant	Highland Creek Water Treatment Plant	1160 Highland Creek W., Toronto, ON, Canada	0.5232 kg
NA - 16	Ammonia (total)	Chemical Treatment	Detox Environmental Ltd.	322 Bennett, Bowmanville, ON, Canada	0.502 tonnes
NA - 16	Ammonia (total)	Chemical Treatment	Sure Horizon Environmental	40 Advance Blvd., Berampton, ON, L6T 4J4, Canada	0.279 tonnes
NA - 16	Ammonia (total)	Chemical Treatment	Highland Creek Water Treatment Plant	1160 Highland Creek W., Toronto, ON, Canada	
NA - 16	Ammonia (total)	Municipal Sewage Treatment Plant	Highland Creek Water Treatment Plant	1160 Highland Creek W., Toronto, ON, Canada	0.185 tonnes

Disposals - Total Quantity Disposed (All Media)

CAS RN	Substance Name	Total Quantity Disposed (All Media)
NA - 16	Ammonia (total)	0.966 tonnes
NA - 06	Copper (and its compounds)	9.677 tonnes
50-00-0	Formaldehyde	0.051 tonnes
7647-01-0	Hydrochloric acid	0.0049 tonnes
NA - 08	Lead (and its compounds)	5.8140 kg
7697-37-2	Nitric acid	19.6375 tonnes
7664-93-9	Sulphuric acid	25.40 tonnes

Disposals - Reasons and Comments

CAS RN	Substance Name	Reasons Why Substance Was Disposed	Reasons for Changes in Quantities from Previous Year	Comments
50-00-0	Formaldehyde	Contaminated materials	No significant change (i.e. < 10%) or no change	
7647-01-0	Hydrochloric acid	Contaminated materials	Other (specify in On-site Releases comment field)	20090 liters of Cupric chloride was shipped for disposal due to EC EIHW License issue on 2016, not required in 2017 and disposed of Sn Stripper does not contain HCl per supplier and SDS
7664-93-9	Sulphuric acid	Contaminated materials	Other (specify in On-site Releases comment field)	PAL 2 project acid was all disposed
7697-37-2	Nitric acid	Contaminated materials	Other (specify in On-site Releases comment field)	Increased Sn strip disposal
NA - 06	Copper (and its compounds)	Production residues Contaminated materials Pollution abatement residues	Other (specify in On-site Releases comment field)	3 MT of Cu in filter cake recycled, more etchant recycled and better % Cu return from scrap vendor.
NA - 08	Lead (and its compounds)	Contaminated materials Pollution abatement residues	No significant change (i.e. < 10%) or no change	
NA - 16	Ammonia (total)	Contaminated materials	No significant change (i.e. < 10%) or no change	More dragout from SES line

Recycling - Off-site Transfers for Recycling

CAS RN	Substance Name	Category	Basis of Estimate	Detail Code	Quantity

CAS RN	Substance Name	Category	Basis of Estimate	Detail Code	Quantity
NA - 16	Ammonia (total)	Recovery of Inorganic Materials (not metals)	O - Engineering Estimates		25.82 tonnes
NA - 06	Copper (and its compounds)	Recovery of Metals and Metal Compounds	O - Engineering Estimates		130.018 tonnes
7647-01-0	Hydrochloric acid	Recovery of Inorganic Materials (not metals)	O - Engineering Estimates		63.74 tonnes
NA - 08	Lead (and its compounds)	Recovery of Metals and Metal Compounds	O - Engineering Estimates		298.314 kg

Recycling - Off-site Transfers for Recycling - Total

CAS RN	Substance Name	Total - Off-site Transfers for Recycling
NA - 16	Ammonia (total)	25.82 tonnes
NA - 06	Copper (and its compounds)	130.018 tonnes
7647-01-0	Hydrochloric acid	63.74 tonnes
NA - 08	Lead (and its compounds)	298.314 kg

Recycling - Off-site Transfers for Recycling - By Facility

CAS RN	Substance Name	Category	Off-site Name	Off-site Address	Quantity
7647-01-0	Hydrochloric acid	Recovery of Inorganic Materials (not metals)	Micronutrients	1550 Research Way, Indianapolis, IN, United States	63.74 tonnes
NA - 06	Copper (and its compounds)	Recovery of Metals and Metal Compounds	Reldan Metals, LLC	550 Old Bordentown Road, , Fairless Hills, PA, USA	43.488 tonnes
NA - 06	Copper (and its compounds)	Recovery of Metals and Metal Compounds	Micronutrients	1550 Research Way, Indianapolis, IN, United States	67.986 tonnes
NA - 06	Copper (and its compounds)	Recovery of Metals and Metal Compounds	Combined Metal Industries Inc.	505 B Garyray Dr., Weston, ON, Canada	15.411 tonnes
NA - 06	Copper (and its compounds)	Recovery of Metals and Metal Compounds	Detox Environmental Ltd.	322 Bennett, Bowmanville, ON, Canada	3.133 tonnes
NA - 08	Lead (and its compounds)	Recovery of Metals and Metal Compounds	Combined Metal Industries Inc.	505 B Garyray Dr., Weston, ON, Canada	298.314 kg
NA - 16	Ammonia (total)	Recovery of Inorganic Materials (not metals)	Micronutrients	1550 Research Way, Indianapolis, IN, United States	25.82 tonnes

Recycling - Reasons and Comments

CAS RN	Substance Name	Reasons Why Substance Was Recycled	Reasons for Changes in Quantities Recycled from Previous Year	Comments
50-00-0	Formaldehyde		Other (specify in recycling comments field)	Formaldehyde not recycled
7647-01-0	Hydrochloric acid	Contaminated materials	Other (specify in recycling comments field)	Increase N of cupric due to new DES line start up problems
7664-93-9	Sulphuric acid		Other (specify in recycling comments field)	H2SO4 not being recycled
7697-37-2	Nitric acid		Other (specify in recycling comments field)	Nitric Acid is not recycled
NA - 06	Copper (and its compounds)	Production Residues Contaminated materials Unusable parts or discards Pollution abatement residues Machine or finishing residues	Other (specify in recycling comments field)	Some filter cake recycled, more etchant recycled and better % Cu return from the scrap vendor
NA - 08	Lead (and its compounds)	Off-specification products Contaminated materials Unusable parts or discards	No significant change (i.e. < 10%) or no change	
NA - 16	Ammonia (total)	Contaminated materials	Other (specify in recycling comments field)	More panels etched

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
NA - 16	Ammonia (total)	No	Enters the facility (Use)	42.95 tonnes	41.97 tonnes	2016	0.98	2.34
NA - 16	Ammonia (total)	No	Creation	0 tonnes	0 tonnes	2016	0	
NA - 16	Ammonia (total)	No	Contained in Product	0 tonnes	0 tonnes	2016	0	
NA - 06	Copper (and its compounds)	No	Enters the facility (Use)	164.757 tonnes	159.637 tonnes	2016	5.120	3.21
NA - 06	Copper (and its compounds)	No	Creation	0 tonnes	0 tonnes	2016	0	
NA - 06	Copper (and its compounds)	No	Contained in Product	25.062 tonnes	31.759 tonnes	2016	-6.697	-21.09
50-00-0	Formaldehyde	No	Enters the facility (Use)	19.489 tonnes	20.405 tonnes	2016	-0.916	-4.49
50-00-0	Formaldehyde	No	Creation	0 tonnes	0 tonnes	2016	0	

CAS RN	Substance Name	Is Breakdown	Category	Quantity	Last Reported Quantity	Reporting Period of Last Reported Quantity	Change	% Change
50-00-0	Formaldehyde	No	Contained in Product	0 tonnes	0 tonnes	2016	0	
7647-01-0	Hydrochloric acid	No	Enters the facility (Use)	90.73 tonnes	80.55 tonnes	2016	10.18	12.64
7647-01-0	Hydrochloric acid	No	Creation	0 tonnes	0 tonnes	2016	0	
7647-01-0	Hydrochloric acid	No	Contained in Product	0 tonnes	0 tonnes	2016	0	
NA - 08	Lead (and its compounds)	No	Enters the facility (Use)	334.842 kg	313.914 kg	2016	20.928	6.67
NA - 08	Lead (and its compounds)	No	Creation	0 kg	0 kg	2016	0	
NA - 08	Lead (and its compounds)	No	Contained in Product	30.694 kg	44.506 kg	2016	-13.812	-31.03
7697-37-2	Nitric acid	No	Enters the facility (Use)	34.27 tonnes	27.79 tonnes	2016	6.48	23.32
7697-37-2	Nitric acid	No	Creation	0 tonnes	0 tonnes	2016	0	
7697-37-2	Nitric acid	No	Contained in Product	0 tonnes	0 tonnes	2016	0	
7664-93-9	Sulphuric acid	No	Enters the facility (Use)	112.22 tonnes	109.34 tonnes	2016	2.88	2.63
7664-93-9	Sulphuric acid	No	Creation	0 tonnes	0 tonnes	2016	0	
7664-93-9	Sulphuric acid	No	Contained in Product	0 tonnes	0 tonnes	2016	0	

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

CAS RN	Substance Name	Reason(s) for Change	Other Reason
NA - 16	Ammonia (total)	Other	Increased consumption of fresh etchant to address loss of chloride plus increased SES production
NA - 06	Copper (and its compounds)	No reasons - quantities approximately the same	
50-00-0	Formaldehyde	No reasons - quantities approximately the same	
7647-01-0	Hydrochloric acid	Other	Bought more acid for DI regen and DES line use.
NA - 08	Lead (and its compounds)	No reasons - quantities approximately the same	
7697-37-2	Nitric acid	Other	switched Sn strippers which did not work well and increased Ni tank stripper concentration
7664-93-9	Sulphuric acid	Other	More acid was bought for PAL 2 project

Comparison Report - On-site Releases

CAS RN	Substance Name	Is Breakdown	Category	Quantity	Last Reported Quantity	Reporting Period of Last Reported Quantity	Change	% Change
NA - 16	Ammonia (total)	No	Total Releases to Air	16.17 tonnes	17.92 tonnes	2016	-1.75	-9.77
NA - 16	Ammonia (total)	No	Total Releases to Water	0 tonnes	0 tonnes	2016	0	
NA - 16	Ammonia (total)	No	Total Releases to Land	0 tonnes	0 tonnes	2016	0	
NA - 16	Ammonia (total)	No	Total Releases to All Media	0 tonnes				
50-00-0	Formaldehyde	No	Total Releases to Air	0 tonnes				
50-00-0	Formaldehyde	No	Total Releases to Water	0 tonnes				
50-00-0	Formaldehyde	No	Total Releases to Land	0 tonnes				
50-00-0	Formaldehyde	No	Total Releases to All Media	0.030 tonnes	0.03 tonnes	2016	0.000	0.0
7647-01-0	Hydrochloric acid	No	Total Releases to Air	0 tonnes				
7647-01-0	Hydrochloric acid	No	Total Releases to Water	0 tonnes				
7647-01-0	Hydrochloric acid	No	Total Releases to Land	0 tonnes				
7647-01-0	Hydrochloric acid	No	Total Releases to All Media	0.898 tonnes	0.898 tonnes	2016	0.000	0
NA - 08	Lead (and its compounds)	No	Total Releases to Air	0.020 kg	0.019 kg	2016	0.001	5.26

CAS RN	Substance Name	Is Breakdown	Category	Quantity	Last Reported Quantity	Reporting Period of Last Reported Quantity	Change	% Change
NA - 08	Lead (and its compounds)	No	Total Releases to Water	0 kg	0 kg	2016	0	
NA - 08	Lead (and its compounds)	No	Total Releases to Land	0 kg	0 kg	2016	0	
NA - 08	Lead (and its compounds)	No	Total Releases to All Media	0 kg				
7697-37-2	Nitric acid	No	Total Releases to Air	1.394 tonnes	1.258 tonnes	2016	0.136	10.81
7697-37-2	Nitric acid	No	Total Releases to Water	0 tonnes	0 tonnes	2016	0	
7697-37-2	Nitric acid	No	Total Releases to Land	0 tonnes	0 tonnes	2016	0	
7697-37-2	Nitric acid	No	Total Releases to All Media	0 tonnes				
7664-93-9	Sulphuric acid	No	Total Releases to Air	0 tonnes				
7664-93-9	Sulphuric acid	No	Total Releases to Water	0 tonnes				
7664-93-9	Sulphuric acid	No	Total Releases to Land	0 tonnes				
7664-93-9	Sulphuric acid	No	Total Releases to All Media	0.0002 tonnes	0.0002 tonnes	2016	0.0000	0

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

CAS RN	Substance Name	Reason(s) for Change	Other Reason
NA - 16	Ammonia (total)	Other	Less Ammonium Hydroxide used to adjust pH of Etcher
50-00-0	Formaldehyde	No reasons - quantities approximately the same	
7647-01-0	Hydrochloric acid	No reasons - quantities approximately the same	
NA - 08	Lead (and its compounds)	No reasons - quantities approximately the same	
7697-37-2	Nitric acid	Other	Changed Ni Nitric stripper formulation from 30& to 41% w/w
7664-93-9	Sulphuric acid	No reasons - quantities approximately the same	

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
NA - 16	Ammonia (total)	No	Total On-site Disposals	0 tonnes	0 tonnes	2016	0	
NA - 16	Ammonia (total)	No	Total Off-site Disposals	0 tonnes	0 tonnes	2016	0	
NA - 16	Ammonia (total)	No	Total Off-site transfer for treatment Prior to Final Disposal	0.966 tonnes	0.622 tonnes	2016	0.344	55.31
NA - 16	Ammonia (total)	No	Total On-site Disposal of Tailings and Waste Rock	0 tonnes	0 tonnes	2016	0	
NA - 16	Ammonia (total)	No	Total Off-site Disposal of Tailings and Waste Rock	0 tonnes	0 tonnes	2016	0	
NA - 06	Copper (and its compounds)	No	Total On-site Disposals	0 tonnes	0 tonnes	2016	0	
NA - 06	Copper (and its compounds)	No	Total Off-site Disposals	0 tonnes	0 tonnes	2016	0	
NA - 06	Copper (and its compounds)	No	Total Off-site transfer for treatment Prior to Final Disposal	9.677 tonnes	14.42 tonnes	2016	-4.743	-32.89
NA - 06	Copper (and its compounds)	No	Total On-site Disposal of Tailings and Waste Rock	0 tonnes	0 tonnes	2016	0	
NA - 06	Copper (and its compounds)	No	Total Off-site Disposal of Tailings and Waste Rock	0 tonnes	0 tonnes	2016	0	
50-00-0	Formaldehyde	No	Total On-site Disposals	0 tonnes	0 tonnes	2016	0	
50-00-0	Formaldehyde	No	Total Off-site Disposals	0 tonnes	0 tonnes	2016	0	
50-00-0	Formaldehyde	No	Total Off-site transfer for treatment Prior to Final Disposal	0.051 tonnes	0.042 tonnes	2016	0.009	21.43
50-00-0	Formaldehyde	No	Total On-site Disposal of Tailings and Waste Rock	0 tonnes	0 tonnes	2016	0	
50-00-0	Formaldehyde	No	Total Off-site Disposal of Tailings and Waste Rock	0 tonnes	0 tonnes	2016	0	
7647-01-0	Hydrochloric acid	No	Total On-site Disposals	0 tonnes	0 tonnes	2016	0	
7647-01-0	Hydrochloric acid	No	Total Off-site Disposals	0 tonnes	0 tonnes	2016	0	
7647-01-0	Hydrochloric acid	No	Total Off-site transfer for treatment Prior to Final Disposal	0.0049 tonnes	4.1405 tonnes	2016	-4.1356	-99.88
7647-01-0	Hydrochloric acid	No	Total On-site Disposal of Tailings and Waste Rock	0 tonnes	0 tonnes	2016	0	

CAS RN	Substance Name	Is Breakdown	Category	Quantity	Last Reported Quantity	Reporting Period of Last Reported Quantity	Change	% Change
7647-01-0	Hydrochloric acid	No	Total Off-site Disposal of Tailings and Waste Rock	0 tonnes	0 tonnes	2016	0	
NA - 08	Lead (and its compounds)	No	Total On-site Disposals	0 kg	0 kg	2016	0	
NA - 08	Lead (and its compounds)	No	Total Off-site Disposals	0 kg	0 kg	2016	0	
NA - 08	Lead (and its compounds)	No	Total Off-site transfer for treatment Prior to Final Disposal	5.8140 kg	9.127 kg	2016	-3.3130	-36.30
NA - 08	Lead (and its compounds)	No	Total On-site Disposal of Tailings and Waste Rock	0 kg	0 kg	2016	0	
NA - 08	Lead (and its compounds)	No	Total Off-site Disposal of Tailings and Waste Rock	0 kg	0 kg	2016	0	
7697-37-2	Nitric acid	No	Total On-site Disposals	0 tonnes	0 tonnes	2016	0	
7697-37-2	Nitric acid	No	Total Off-site Disposals	0 tonnes	0 tonnes	2016	0	
7697-37-2	Nitric acid	No	Total Off-site transfer for treatment Prior to Final Disposal	19.6375 tonnes	17.19 tonnes	2016	2.4475	14.24
7697-37-2	Nitric acid	No	Total On-site Disposal of Tailings and Waste Rock	0 tonnes	0 tonnes	2016	0	
7697-37-2	Nitric acid	No	Total Off-site Disposal of Tailings and Waste Rock	0 tonnes	0 tonnes	2016	0	
7664-93-9	Sulphuric acid	No	Total On-site Disposals	0 tonnes	0 tonnes	2016	0	
7664-93-9	Sulphuric acid	No	Total Off-site Disposals	0 tonnes	0 tonnes	2016	0	
7664-93-9	Sulphuric acid	No	Total Off-site transfer for treatment Prior to Final Disposal	25.40 tonnes	26.32 tonnes	2016	-0.92	-3.50
7664-93-9	Sulphuric acid	No	Total On-site Disposal of Tailings and Waste Rock	0 tonnes	0 tonnes	2016	0	
7664-93-9	Sulphuric acid	No	Total Off-site Disposal of Tailings and Waste Rock	0 tonnes	0 tonnes	2016	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
NA - 16	Ammonia (total)	Other	More dragout from SES line
NA - 06	Copper (and its compounds)	Other	3 MT of Cu in filter cake recycled, more etchant recycledand better % of cu return from the scrap vendor.
50-00-0	Formaldehyde	No reasons - quantities approximately the same	
7647-01-0	Hydrochloric acid	Other	20090 liters of Cupric chloride was shipped for disposal due to EC EIHW License issue on 2016, not required in 2017 and disposed of Sn Stripper does not contain HCl per supplier and SDS
NA - 08	Lead (and its compounds)	Decrease in production levels Other	Fewer panels HASLed. Shipped out less Flux and contaminated rags
7697-37-2	Nitric acid	Other	Increased Sn strip disposal
7664-93-9	Sulphuric acid	Other	PAL 2 project acid was all disposed

Comparison Report - Transfers off-site for Recycling

CAS RN	Substance Name	Is Breakdown	Category	Quantity	Last Reported Quantity	Reporting Period of Last Reported Quantity	Change	% Change
NA - 16	Ammonia (total)	No	Total off-site Transfers for Recycling	25.82 tonnes	23.35 tonnes	2016	2.47	10.58
NA - 06	Copper (and its compounds)	No	Total off-site Transfers for Recycling	130.018 tonnes	113.45 tonnes	2016	16.568	14.60
7647-01-0	Hydrochloric acid	No	Total off-site Transfers for Recycling	63.74 tonnes	54.62 tonnes	2015	9.12	16.70
NA - 08	Lead (and its compounds)	No	Total off-site Transfers for Recycling	298.314 kg	260.262 kg	2016	38.052	14.62

Comparison Report - Transfers off-site for Recycling - Reason(s) for Change

CAS RN	Substance Name	Reason(s) for Change	Other Reason
NA - 16	Ammonia (total)	Other	more panels etched
NA - 06	Copper (and its compounds)	Other	3 MT of Cu in filter cake recycled, more etchant recycledand better % of cu return from the scrap vendor.
7647-01-0	Hydrochloric acid	Other	Increased N of cupric due to new DES line start up problems.
NA - 08	Lead (and its compounds)	Other	Based on CMI report

CAS RN	Substance Name	Reason(s) for Change	Other Reason

Pollution Prevention

Does the facility have a documented pollution prevention plan?	Yes
a) Please check all that apply	Plan was prepared or implemented for another government jurisdiction (i.e. other Federal government department, province, municipality). Specify name in comments field below.
b) Did the facility update their plan in the current reporting year?	No
c) Does the plan address substances, energy conservation, or water conservation?	Substances (provide the name of the primary Substances in the comments field below)
Please summarize your pollution prevention plan. If you selected "Substances", please specify the substances that were addressed in your plan (this information will be publicly available).	We have an MOE TRA Plan and a City of Toronto P2 Plan
Did the facility complete any pollution prevention activities in the current NPRI reporting year	Yes

Pollution Prevention Activities

Category	Activity	Name and description of the other activity
Equipment or Process Modification	Modified stripping / cleaning devices	
Good Operating Practice or Training		
Inventory Management or Purchasing Techniques		
Materials or feedstock substitution		
On-site Reuse, Recycling or Recovery		
Other Pollution Prevention Activities		
Product Design or Reformulation		
Spill and Leak Prevention	Implemented inspection or monitoring program of potential spill or leak sources	Potential spill or leak are being monitored through LPA program.

Progress on TRA Plan - Objectives

CAS RN	Substance Name	Objectives
NA - 16	Ammonia (total)	Viasystems intends to reduce NH3 but additional research and testing is required prior to stating any commitment
NA - 06	Copper (and its compounds)	DDi has successfully implemented the toxic reduction option.
50-00-0	Formaldehyde	DDi intends to conduct further research to identify new reduction options
7647-01-0	Hydrochloric acid	DDi intends to reduce HCL but additional research and testing is required prior to the commitment.
NA - 08	Lead (and its compounds)	DDi intends to reduce the use of Lead in the HASL process.
7697-37-2	Nitric acid	Viasystems intends to reduce HNO3 but additional research and testing is required prior to any commitment
7664-93-9	Sulphuric acid	DDi intends to reduce H2SO4 but additional research and testing is required prior to the commitment

Progress on TRA Plan - Use Targets

CAS RN	Substance Name	Quantity	Years	Description of Target
NA - 16	Ammonia (total)	No quantity target	No timeline target	
NA - 06	Copper (and its compounds)	No quantity target	No timeline target	
50-00-0	Formaldehyde	No quantity target	No timeline target	
7647-01-0	Hydrochloric acid	No quantity target	No timeline target	
NA - 08	Lead (and its compounds)	90.83 kg	2	Q4 2014
7697-37-2	Nitric acid	No quantity target	No timeline target	
7664-93-9	Sulphuric acid	No quantity target	No timeline target	

Progress on TRA Plan - Creation Targets

CAS RN	Substance Name	Quantity	Years	Description of Target
NA - 16	Ammonia (total)	No quantity target	No timeline target	
NA - 06	Copper (and its compounds)	No quantity target	No timeline target	
50-00-0	Formaldehyde	No quantity target	No timeline target	

CAS RN	Substance Name	Quantity	Years	Description of Target
7647-01-0	Hydrochloric acid	No quantity target	No timeline target	
NA - 08	Lead (and its compounds)	No quantity target	No timeline target	
7697-37-2	Nitric acid	No quantity target	No timeline target	
7664-93-9	Sulphuric acid	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
NA - 16	Ammonia (total)	Other	No action taken	No testing initiated	No action taken	No testing initiated
NA - 08	Lead (and its compounds)	Modified equipment, layout or piping	No action taken	No testing initiated	No action taken	No testing initiated
7697-37-2	Nitric acid	Changed to aqueous cleaners	No action taken	No testing initiated	No action taken	No testing initiated
7697-37-2	Nitric acid	Initiated testing of outdated material	No action taken	No testing initiated	No action taken	No testing initiated
7697-37-2	Nitric acid	Instituted recirculation within a process	No action taken	No testing initiated	No action taken	No testing initiated
7697-37-2	Nitric acid	Other	No action taken	No testing initiated	No action taken	No testing initiated

CAS RN	Substance Name	Activity	Will the timelines in the current version of the plan will be met	Comments:
NA - 16	Ammonia (total)	Other	Yes	
NA - 08	Lead (and its compounds)	Modified equipment, layout or piping	Yes	
7697-37-2	Nitric acid	Changed to aqueous cleaners	Yes	
7697-37-2	Nitric acid	Initiated testing of outdated material	Yes	
7697-37-2	Nitric acid	Instituted recirculation within a process	Yes	
7697-37-2	Nitric acid	Other	Yes	

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 - 08	Lead (and its compounds)	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 - 08	Lead (and its compounds)	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 - 08	Lead (and its compounds)	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 - 08	Lead (and its compounds)	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 - 08	Lead (and its compounds)	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 - 08	Lead (and its compounds)	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 - 08	Lead (and its compounds)	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 - 08	Lead (and its compounds)	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 - 08	Lead (and its compounds)	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
7697-37-2	Nitric acid	Changed to aqueous cleaners	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
7697-37-2	Nitric acid	Changed to aqueous cleaners	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
7697-37-2	Nitric acid	Changed to aqueous cleaners	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
7697-37-2	Nitric acid	Changed to aqueous cleaners	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
7697-37-2	Nitric acid	Changed to aqueous cleaners	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

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
7697-37-2	Nitric acid	Changed to aqueous cleaners	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
7697-37-2	Nitric acid	Changed to aqueous cleaners	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
7697-37-2	Nitric acid	Changed to aqueous cleaners	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
7697-37-2	Nitric acid	Changed to aqueous cleaners	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 - Improved inventory management or purchasing techniques

CAS RN	Substance Name	Activity	Reductions due to Options Implemented	Quantity
7697-37-2	Nitric acid	Initiated testing of outdated material	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
7697-37-2	Nitric acid	Initiated testing of outdated material	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
7697-37-2	Nitric acid	Initiated testing of outdated material	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
7697-37-2	Nitric acid	Initiated testing of outdated material	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
7697-37-2	Nitric acid	Initiated testing of outdated material	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
7697-37-2	Nitric acid	Initiated testing of outdated material	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
7697-37-2	Nitric acid	Initiated testing of outdated material	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
7697-37-2	Nitric acid	Initiated testing of outdated material	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
7697-37-2	Nitric acid	Initiated testing of outdated material	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
7697-37-2	Nitric acid	Instituted recirculation within a process	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
7697-37-2	Nitric acid	Instituted recirculation within a process	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
7697-37-2	Nitric acid	Instituted recirculation within a process	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
7697-37-2	Nitric acid	Instituted recirculation within a process	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
7697-37-2	Nitric acid	Instituted recirculation within a process	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
7697-37-2	Nitric acid	Instituted recirculation within a process	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
7697-37-2	Nitric acid	Instituted recirculation within a process	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
7697-37-2	Nitric acid	Instituted recirculation within a process	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
7697-37-2	Nitric acid	Instituted recirculation within a process	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
NA - 16	Ammonia (total)	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 - 16	Ammonia (total)	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 - 16	Ammonia (total)	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 - 16	Ammonia (total)	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 - 16	Ammonia (total)	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 - 16	Ammonia (total)	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 - 16	Ammonia (total)	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 - 16	Ammonia (total)	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 - 16	Ammonia (total)	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
7697-37-2	Nitric 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
7697-37-2	Nitric 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
7697-37-2	Nitric 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
7697-37-2	Nitric 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
7697-37-2	Nitric 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
7697-37-2	Nitric 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
7697-37-2	Nitric 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
7697-37-2	Nitric 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
7697-37-2	Nitric 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

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
NA - 16	Ammonia (total)	No		
NA - 06	Copper (and its compounds)	No		
50-00-0	Formaldehyde	No		
7647-01-0	Hydrochloric acid	Yes	Installation of ne RO system	Viasystems installed a new RO system that does not need regeneration therefore eliminating the use of HCl for its regen purposes. The DI system will act as a back up to assure continuous supply of pure water.
NA - 08	Lead (and its compounds)	No		
7697-37-2	Nitric acid	No		
7664-93-9	Sulphuric acid	No		

Progress on TRA Plan - Reductions due to additional actions taken

CAS RN	Substance Name	Reductions due to additional actions taken	Quantity
NA - 16	Ammonia (total)	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - 16	Ammonia (total)	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the additional actions.	
NA - 16	Ammonia (total)	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 - 16	Ammonia (total)	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 - 16	Ammonia (total)	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 - 16	Ammonia (total)	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 - 16	Ammonia (total)	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 - 16	Ammonia (total)	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 - 16	Ammonia (total)	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 - 06	Copper (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 - 06	Copper (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.	

CAS RN	Substance Name	Reductions due to additional actions taken	Quantity
NA - 06	Copper (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 - 06	Copper (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 - 06	Copper (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 - 06	Copper (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 - 06	Copper (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 - 06	Copper (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 - 06	Copper (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.	
50-00-0	Formaldehyde	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the additional actions.	
50-00-0	Formaldehyde	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the additional actions.	
50-00-0	Formaldehyde	The amount of reduction in the substance **contained in product** at the facility during the reporting period that resulted due to the additional actions.	
50-00-0	Formaldehyde	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.	
50-00-0	Formaldehyde	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.	
50-00-0	Formaldehyde	The amount of reduction in **release to land** of the substance at the facility during the reporting period that resulted due to additional actions.	
50-00-0	Formaldehyde	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.	
50-00-0	Formaldehyde	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.	
50-00-0	Formaldehyde	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.	18 tonnes
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.	No Amount
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.	No Amount
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.	No Amount
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.	No Amount
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.	No Amount
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.	No Amount
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.	No Amount
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.	No Amount
NA - 08	Lead (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 - 08	Lead (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 - 08	Lead (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 - 08	Lead (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 - 08	Lead (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 - 08	Lead (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 - 08	Lead (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 - 08	Lead (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 - 08	Lead (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.	
7697-37-2	Nitric acid	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the additional actions.	
7697-37-2	Nitric acid	The amount of reduction in **creation** 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
7697-37-2	Nitric 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.	
7697-37-2	Nitric 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.	
7697-37-2	Nitric 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.	
7697-37-2	Nitric 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.	
7697-37-2	Nitric 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.	
7697-37-2	Nitric 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.	
7697-37-2	Nitric 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.	
7664-93-9	Sulphuric acid	The amount of reduction in **use** of the substance at the facility during the reporting period that resulted due to the additional actions.	
7664-93-9	Sulphuric acid	The amount of reduction in **creation** of the substance at the facility during the reporting period that resulted due to the additional actions.	
7664-93-9	Sulphuric 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.	
7664-93-9	Sulphuric 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.	
7664-93-9	Sulphuric 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.	
7664-93-9	Sulphuric 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.	
7664-93-9	Sulphuric 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.	
7664-93-9	Sulphuric 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.	
7664-93-9	Sulphuric 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.	

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
NA - 16	Ammonia (total)	No		
NA - 06	Copper (and its compounds)	No		
50-00-0	Formaldehyde	No		
7647-01-0	Hydrochloric acid	No		
NA - 08	Lead (and its compounds)	No		
7697-37-2	Nitric acid	No		
7664-93-9	Sulphuric acid	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

Viasystems Toronto, Inc.

Certifying Official (or authorized delegate)

Mark Scruton

Report Submitted by

Jon Pereira

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 29/05/2018, I, Jon Pereira, 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
NA - 16	Ammonia (total)
NA - 06	Copper (and its compounds)
50-00-0	Formaldehyde
7647-01-0	Hydrochloric acid
NA - 08	Lead (and its compounds)
7697-37-2	Nitric acid
7664-93-9	Sulphuric acid

Company Name

Viasystems Toronto, Inc.

Highest Ranking Employee

Jon Pereira

Report Submitted by

Jon Pereira

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
2017	29/05/2018	Sheppard Facility	Ontario	Toronto	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.

Version: 3.14.0