Report Preview **Company Details** Name Viasystems Toronto, Inc. Address 8150 Sheppard Avenue East, Toronto (Ontario) Report Details Report Status Submitted 2014 Report Type Inventory **Facility Name Sheppard Facility Facility Address** 8150 Sheppard Avenue East, Toronto (Ontario) **Update Comments Activity Details** Applicable Programs Please select all that apply. **Environment Canada Programs** \times NPRI - National Pollutant Release Inventory **Partnering Programs** $|\mathsf{X}|$ ON MOE TRA - Ontario Ministry of the Environment for the Toxic Reductions Act ON MOE Reg. 127/01 - Ontario Ministry of the Environment for the Airborne Contaminant Discharge

Monitoring and Reporting Regulation

	NERM - Chemistry Industry Association of Canada for the National Emission Reduction Masterplan survey
	NFPRER - National Framework for Petroleum Refinery Emission Reductions
Con	itacts
Selec	t the appropriate person from the drop-down menu for each contact.
Fac	ility Contacts
	t the appropriate person from the drop-down menu for each contact.
Techr	nical Contact: *
Mark	Scruton
Certif	ying Official (or authorized delegate): *
Mark	Scruton
Highe	est Ranking Employee: *
Jon F	Pereira
Perso	on who prepared the report: *
Mark	Scruton
	on who coordinated the preparation of the Toxics Reduction Plan (required after a plan summary has submitted)
Mark	Scruton
Comp	pany Coordinator (optional)
Mark	Scruton
Public	c Contact (optional)
Mark	Scruton
Contr	actor Contact (optional)
If you	are an independent contractor or consultant, please enter your company name in the field below
Fm	oloyees and Activities
•	oloyees
•	•
Numb	per of Employees *

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525						
Activities						
If your facility "None of the	was engage Above". For	•	J		relevant box(es), f these activities	otherwise click then you must report
Activities for \	Which the 20	0,000-Hour Emp	oloyee Thresho	ld Does Not Ap	ply: (check all tha	at apply) *
None of the a	above					
Activities Rel	evant to Rep	porting Dioxins,	Furans and He	xacholorobenze	ene: (check all th	at apply) *
None of the	above					
Activities (PAHs)	Relevar	nt to Report	ting of Poly	ycyclic Aro	matic Hydro	ocarbons
	ing activity t	take place at the	e facility?			
Wood preser	vation using	creosote: *				
No						
General I	Facility I	nformation				
NPRI						
Is this the firs	t time the fa	cility is reporting	g to the NPRI (ι	under current or	past ownership)	? *
No						
Is the facility	controlled by	y another Canad	dian company d	or companies? *		
No						
Did the facility	y report und	er other environ	mental regulati	ons or permits?	*	
Yes						
Is the facility	required to r	eport one or mo	ore NPRI Part 4	substances (C	riteria Air Contar	ninants)? *
No						
If 'Yes' to rep during the ye	orting for on ar? **	e or more Part [∠]	1 substances:V	Vas the facility s	hut down for mo	re than one week
Operating	g Sched	ule - Days	of the Wee	ek **		
Mon	Tue	Wed	Thu	Fri	Sat	Sun

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Jsual Number of Operating Hours per day	Usual Daily Start Time (24h) (hh:mm)
hutdown Periods **	
o report a shutdown period, click the "+" sign to t mpty	he right side of the screen.
Seneral Comments for Facility	
Comments	
Verify Facility Information	
Company Information	
Company Details	
ompany Legal Name	Viasystems Toronto, Inc.
usiness Number	122456379
Mailing Address	
elivery Mode	General Delivery
O Box	
ural Route Number	
ddress Line 1	8150 Sheppard Avenue East
ity *	Toronto
rovince/Territory **	Ontario
ostal Code: **	M1B5K2
country *	Canada
acility Information	
acility *	Sheppard Facility
IAICS Code *	334410

NPRI ID *	11606 (Assigned by Environment Canada)		
Facility Physical Address			
Address Line 1	8150 Sheppard Avenue East		
City	Toronto		
Province/Territory	Ontario		
Postal Code	M1B5K2		
Country	Canada		
Additional Information			
Land Survey Description			
National Topographical Description			
Geographical Address			
Latitude **	43.80339		
Longitude **	-79.19711		
UTM Zone **	17		
UTM Easting **	645022		
UTM Northing **	4851615		
Facility Contacts			
Contact Types			
Technical Contact			
First Name: *	Mark		
Last Name: *	Scruton		
Position: *	Dir. of EHSS		
Telephone: *	4162082127		

Ext	
Fax	4162082154
Email: *	Mark.Scruton@viasystems.com
Mailing Address	
Delivery Mode	
PO Box	
Rural Route Number	
Address Line 1	8150 Sheppard Avenue East
City *	Toronto
Province/Territory **	Ontario
Postal Code: **	M1B5K2
Country *	Canada
Certifying Official	
First Name: *	Mark
Last Name: *	Scruton
Position: *	Dir. of EHSS
Telephone: *	4162082127
Ext	
Fax	4162082154
Email: *	Mark.Scruton@viasystems.com
Mailing Address	
Delivery Mode	
PO Box	

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Dural Dauta Number		
Rural Route Number		
Address Line 1	8150 Sheppard Avenue East	
City *	Toronto	
Province/Territory **	Ontario	
Postal Code: **	M1B5K2	
Country *	Canada	
Company Coordinator		
First Name: *	Mark	
Last Name: *	Scruton	
Position: *	Dir. of EHSS	
Telephone: *	4162082127	
Ext		
Fax	4162082154	
Email: *	Mark.Scruton@viasystems.com	
Mailing Address		
Delivery Mode		
PO Box		
Rural Route Number		
Address Line 1	8150 Sheppard Avenue East	
City *	Toronto	
Province/Territory **	Ontario	
Postal Code: **	M1B5K2	
Country *	Canada	

Highest Ranking Employee			
First Name: *	Jon		
Last Name: *	Pereira		
Position: *	General Manager		
Telephone: *	4162082100		
Ext	2206		
Fax			
Email: *	Jon.Pereira@viasystems.com		
Mailing Address			
Delivery Mode	General Delivery		
PO Box			
Rural Route Number			
Address Line 1	8150 Sheppard Avenue East		
City *	Toronto		
Province/Territory **	Ontario		
Postal Code: **	M1B 5K2		
Country *	Canada		
Person who prepared the report			
First Name: *	Mark		
Last Name: *	Scruton		
Position: *	Dir. of EHSS		
Telephone: *	4162082127		
Ext			

Fax	4162082154	
Email: *	Mark.Scruton@viasystems.com	
Mailing Address		
Delivery Mode		
PO Box		
Rural Route Number		
Address Line 1	8150 Sheppard Avenue East	
City *	Toronto	
Province/Territory **	Ontario	
Postal Code: **	M1B5K2	
Country *	Canada	
Person who coordinated the preparat	ion of the Toxics Reduction Plan	
First Name: *	Mark	
Last Name: *	Scruton	
Position: *	Dir. of EHSS	
Telephone: *	4162082127	
Ext		
Fax	4162082154	
Email: *	Mark.Scruton@viasystems.com	
Mailing Address		
Delivery Mode		
PO Box		
Rural Route Number		

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Address Line 1	8150 Sheppard Avenue East
City *	Toronto
Province/Territory **	Ontario
Postal Code: **	M1B5K2
Country *	Canada
Public Contact	
First Name: *	Mark
Last Name: *	Scruton
Position: *	Dir. of EHSS
Telephone: *	4162082127
Ext	
Fax	4162082154
Email: *	Mark.Scruton@viasystems.com
Mailing Address	
Delivery Mode	
PO Box	
Rural Route Number	
Address Line 1	8150 Sheppard Avenue East
City *	Toronto
Province/Territory **	Ontario
Postal Code: **	M1B5K2
Country *	Canada

Environmental Regulations or Permits
Permits
8991-6N5LSA
Number or Permit Number
8991-6N5LSA
Government Department, Agency, or Program Name
Ministry of the Environment, Cert. of Air Approval
ON0761503
Number or Permit Number
ON0761503
Government Department, Agency, or Program Name
Ministry of the Environment, Regulation 347
533929
Number or Permit Number
533929
Government Department, Agency, or Program Name
CEPA EIHW Export Notice Number (2013 - 2014)
536021
Number or Permit Number
536021
Government Department, Agency, or Program Name
CEPA EIHW Export Notice Number (2014 - 2015)
Pollution Prevention
Pollution Prevention Plans
Does the facility have a documented pollution prevention plan? *
Yes
If 'Yes'

a) Please check all that apply

Plan was prepared or implemented for another government jurisdiction (i.e. other Fenderal 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

Please summarize your pollution prevention plan and/or your pollution prevention activities (this information will be publicly available) **

We have an MOE TRA Plan and a City of Toronto P2 Plan

Pollution Prevention Activities

Did the facility complete any pollution prevention activities in the current NPRI reporting year? *

Yes

Selecting "Yes" will initiate the reporting of the specific pollution prevention activities that were completed in the current reporting year on the following screen.

Pollution Prevention Activities

Please indicate the pollution prevention activities that your facility implemented by checking the appropriate activities from the categories listed below.

Spill or Leak Prevention Activities

Implemented inspection or monitoring program of potential spill or leak sources

Good Operating Practice or Training

Improved maintenance scheduling, record keeping

Substance Details

50-00-0, Formaldehyde

50-00-0, Formaldehyde

Substance Reporting Status

Applicable Programs

NPRI - Does this substance meet the criteria specified in the Canada Gazette notice? Selecting "No" indicates voluntary reporting of this substance to the NPRI. *

Yes

ON MOE TRA - Does this substance meet the criteria specified in the Ontario Regulation 455/09 TRA? Selecting "No" indicates voluntary reporting of this substance to the ON MOE. *	under the
Yes	
Is this considered the first report for this substance to the ON MOE TRA? (Please select "Help" for clarification) *	or further
No	
Would you like to create an exit record for this ON MOE TRA substance? *	
No	
Comments	
General Information about the Substance	
Releases and Transfers of the Substance	
Releases and Transfers of the Substance	
Was the substance released on-site? *	
Yes	
If the substance was released on-site and the total quantity released was less than one tonne, se check-box below	elect the
The substance will be reported as the sum of releases to all media (total of 1 tonne or less	s).
Disposals and Off-site Transfers for Recycling	
Was the substance disposed of (on-site or off-site), or transferred for treatment prior to final disposed	osal? *
Yes	
Is the facility required to report on disposals of tailings and waste rock for the selected reporting p	period? *
No	
Was the substance transferred off-site for recycling? *	
· · · · · ·	
No	
No Nature of Activities * Indicate whether the substance was manufactured, processed, or otherwise used, by selecting the such activities.	he nature o

Process the Substance
As a reactant
Otherwise Use of the Substance
As a physical or chemical processing aid
TRA Quantifications
Enters the facility (Use), Creation, Contained in Product for ON MOE TRA
Enters the facility (Use)
The amount of substance that enters a process as the substance itself or part of another substance, rolled up at the facility level.
Quantity (Tonnes) **
18.901
Do you want to use ranges for public reporting? If "No" is selected you are indicating that any report to the public may contain the exact quantity provided. *
Yes
One of the re
Creation The amount of substance that is created
Quantity (Tonnes) **
0
Do you want to use ranges for public reporting? If "No" is selected you are indicating that any report to the public may contain the exact quantity provided. *
Yes
Contained in Product
The amount of substance contained in product
Quantity (Tonnes) **
0
Do you want to use ranges for public reporting? If "No" is selected you are indicating that any report to the public may contain the exact quantity provided. *
Yes

Change in Method	d of Qu	antification			
	There has been a change in the method or combination of methods used to track and quantify the substance during the previous calendar year				
Describe the changes **					
Select the reason for char	nge: **				
Describe how the change	impact tra	cking and quantifi	cation of the substa	ance **	
Incidents out of th	ne norm	al course of	events		
There have been in previous calendar					d at the facility during the f this substance.
Explain how tracking and	quantificat	tions were affected) **		
Significant Proces	ss Char	nge			
		•	t the facility during	the prev	ious calendar year.
On-site Releases					
Click "Edit" to enter your i	•		calculate totals, yo	ou must c	lick the "Validate" button.
Total Quantity Re	leased	(All Media)			
Releases to All M	edia				
Category		Basis Of Estima	te	Quantit	y (Tonnes)
Total Quantity Released		O - Engineering Estimates		0.030	
Breakdown of An	nual Re	eleases			
☐ Distribute Equally					
Quarterly Breakdo	own *				
Jan - Mar %	Apr - Ju	n %	Jul - Sep %		Oct - Dec %
25	25		25		25

Total %

Land Treatment

Underground Injection

100 Reasons for Changes in Quantities Released from Previous Year Select the applicable reason or reasons * No significant change (i.e. < 10%) or no change Comments ? (On-Site Releases) ** **Disposals** Reasons Why Substance Was Disposed Select one or more reasons Contaminated materials On-site Disposal (excluding Tailings and Waste Rock) Click "Edit" to enter your reportable values. In order to calculate totals, you must click the "Validate" button. On-site Disposal Category **Basis Of Estimate Quantity (Tonnes)** Landfill NA - Not Applicable Land Treatment NA - Not Applicable **Underground Injection** NA - Not Applicable Total - On-site Disposals Off-site Disposal (excluding Tailings and Waste Rock) Off-site Disposal **Basis Of Estimate Quantity (Tonnes)** Category Landfill NA - Not Applicable

NA - Not Applicable

NA - Not Applicable

Storage	NA - Not Applicable	
Total - Off-site Disposals		
Off-site Transfers (exclu	iding Tailings and Waste	Rock)
Off-site Transfers for Tr	eatment Prior to Final Dis	posal
Category	Basis Of Estimate	Quantity (Tonnes)
Physical Treatment	NA - Not Applicable	
Chemical Treatment	O - Engineering Estimates	0.009
Biological Treatment	NA - Not Applicable	
Incineration / Thermal	NA - Not Applicable	
Municipal Sewage Treatment Plant	O - Engineering Estimates	0.034
Total - Treatment Prior to Final Dis	posal	
0.043		
Total Quantity Disposed (All Media	n)	
0.043		
Assign Dianasala / Tran	oforo to Off site Facilities	
· ·	sfers to Off-site Facilities enter the quantity transferred off-site	for disposal in the first Quantity box.
	I to each off-site in its respective qua	·
•	sign to navigate to the off-site search	screen. When you are finished
entering all transfer quantities, clic Assign Disposals / Transfers to Of		
Basis of Estimate for Of	f-sites	
Enter breakdown values for		

Chemical Treatment

Basis of Estimate

O - Engineering Estimates

Quantity (Tonnes)

0.009

Off-site

Off-Site Name	Quantity (Tonnes)	Address
Detox Environmental Ltd.	0.009	322 Bennett, Bowmanville, ON, Canada

Total Assigned (must equal total reported)

0.009

Assign Disposals / Transfers to Off-site Facilities

Choose the Basis of Estimate and enter the quantity transferred off-site for disposal in the first Quantity box. Then enter the quantity transferred to each off-site in its respective quantity field. If you need to add an off-site facility to the list, click the "+" sign to navigate to the off-site search screen. When you are finished entering all transfer quantities, click "Save and Return".

Assign Disposals / Transfers to Off-site Facilities

Basis of Estimate for Off-sites

Enter breakdown values for

Municipal Sewage Treatment Plant

Basis of Estimate

O - Engineering Estimates

Quantity (Tonnes)

0.034

Off-site

Off-Site Name	Quantity (Tonnes)	Address
Highland Creek Water Treatment Plant	0.034	1160 Highland Creek W., Toronto, ON, Canada

Total Assigned (must equal total reported)

0.034

Reasons for C	hanges in Qua	ntities Dispose	d from Previo	us Year
Select the applicable	e reason or reasons.			
Changes in producti	on levels			
Comments? (Dispos	als)			
Due to El. Cu Bath 0	Contamination			
Recycling				
_	hanges in Qua	ntities Recycle	d from Previo	us Year
Select the applicable	e reason or reasons *	•		
Other (specify in rec	ycling comments field)		
Comments? (Recycli	ing)			
Formaldehyde not re	ecycled			
Comparison R	enort: Enters	Creation, Conta	ained in Produ	ıct
•	e required to update a	the current year's tem	plate, including the	companson report.
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
18.901	17.854	2013	1.047	5.86
Creation				
Creation				
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Contained in F	Product			
Contained in F	Product			
Quantity (Tonnes)	Last Reported	Reporting Period	Change	% Change

	Quantity (Tonnes) *	of Last Reported Quantity *	d	
0	0	2013	0	
Reasons	s for Change			
Reasons	for Change			
Reason(s) fo	or Change			
Increase in p	production levels			
(please spec	cify)			

Comparison Report: On-site Releases

Ensure that "Last Reported Quantity" and the "Reporting Period of the last reported quantity" reflect current year's reporting to the last year's values. If you selected the pre-population function, the exact values in your previous year's report will be inserted into the current year's template, including the comparison report. Therefore, you will be required to update all values and texts.

Total Quantity Released (All Media)

Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0.030	0.033	2013	-0.003	-9.09
Reasons for C	Change			
Reasons for C				
Reason(s) for Chang	•			
No reasons - quanti	ties approximately tl	ne same		

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

Ensure that "Last Reported Quantity" and the "Reporting Period of the last reported quantity" reflect current year's reporting to the last year's values. If you selected the pre-population function, the exact values in your previous year's report will be inserted into the current year's template, including the comparison report.

Therefore, you will be required to update all values and texts.

	o . o qui o apaato a			
Total On-site I	Disposals			
Total On-site I	Disposals			
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Total Off-site I	Disposals			
Total Off-site I	Disposals			
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
	ransfer for trea		·	
	ransfer for trea		•	
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0.043	0.035	2013	0.008	22.86
Total On-site I	Disposal of Tail	ings and Waste	Rock	
Total On-site I	Disposal of Tail	ings and Waste	Rock	
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Total Off-site I	Disposal of Tail	ings and Waste	Rock	
Total Off-site I	Disposal of Tail	ings and Waste	Rock	
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	

Reasons for Change
Reasons for Change
Reason(s) for Change
Abnormal incident occurred at facility in the current reporting year, Other
(please specify)
Due to El Cu Bath Contamination
(please specify): Due to El Cu Bath Contamination
7647-01-0, Hydrochloric acid
7647-01-0, Hydrochloric acid
Substance Reporting Status
Applicable Programs
NPRI - Does this substance meet the criteria specified in the Canada Gazette notice? Selecting "No" indicates voluntary reporting of this substance to the NPRI. *
Yes
ON MOE TRA - Does this substance meet the criteria specified in the Ontario Regulation 455/09 under the TRA? Selecting "No" indicates voluntary reporting of this substance to the ON MOE. *
Yes
Is this considered the first report for this substance to the ON MOE TRA? (Please select "Help" for further clarification) *
No
Would you like to create an exit record for this ON MOE TRA substance? *
No
Comments
General Information about the Substance
Releases and Transfers of the Substance
Releases and Transfers of the Substance
Was the substance released on-site? *
Yes

If the substance was released on-site and the total	quantity released w	as less than one	tonne, select the
check-box below			

The substance will be reported as the sum of releases to all media (total of 1 tonne or less).

Disposals and Off-site Transfers for Recycling
Was the substance disposed of (on-site or off-site), or transferred for treatment prior to final disposal? *
Yes
Is the facility required to report on disposals of tailings and waste rock for the selected reporting period? *
No
Was the substance transferred off-site for recycling? *
Yes
Nature of Activities *
Indicate whether the substance was manufactured, processed, or otherwise used, by selecting the nature of such activities.
Manufacture the Substance
Process the Substance
As a reactant
Otherwise Use of the Substance
As a physical or chemical processing aid
TRA Quantifications
Enters the facility (Use), Creation, Contained in Product for ON MOE TRA
Enters the facility (Use)
The amount of substance that enters a process as the substance itself or part of another substance, rolled up at the facility level.
Quantity (Tonnes) **
66.61
Do you want to use ranges for public reporting? If "No" is selected you are indicating that any report to the public may contain the exact quantity provided. *

Cre	eation
The	amount of substance that is created
Quar	ntity (Tonnes) **
0	
	ou want to use ranges for public reporting? If "No" is selected you are indicating that any report to the c may contain the exact quantity provided. *
Yes	
Coi	ntained in Product
The	amount of substance contained in product
Quar	ntity (Tonnes) **
0	
	ou want to use ranges for public reporting? If "No" is selected you are indicating that any report to the c may contain the exact quantity provided. *
Yes	
Ch	ange in Method of Quantification
	ange in Method of Quantification There has been a change in the method or combination of methods used to track and quantify the
Ш	substance during the previous calendar year
Desc	cribe the changes **
Sele	ct the reason for change: **
Desc	cribe how the change impact tracking and quantification of the substance **
	да та
_	
Inci	idents out of the normal course of events
	There have been incidents out of the normal course of events that occurred at the facility during the previous calendar year that affected the results of tracking/quantification of this substance.
Expla	ain how tracking and quantifications were affected **

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Significant Proces	s Change			
☐ There has been a s	significant process cha	nge at the facility durin	g the previous calendar ye	ear.
On-site Releases				
Click "Edit" to enter your r	eportable values.In ord	ler to calculate totals,	you must click the "Validat	e" button.
Total Quantity Re	leased (All Med	ia)		
Releases to All M	edia			
Category	Basis Of Es	stimate	Quantity (Tonnes)	
Total Quantity Released	O - Engine	ering Estimates	0.965	
Breakdown of Anr	nual Releases			
☐ Distribute Equally				
Quarterly Breakdo	own *			
Jan - Mar %	Apr - Jun %	Jul - Sep %	Oct - Dec %	
25	25	25	25	
Total %				
100				
Reasons for Char	nges in Quantitie	es Released fro	m Previous Year	
Select the applicable reas	•			
Changes in estimation me	ethods			
Comments ? (On-Site Rel	eases) **			
Minor Emission Calculation	on rate change, correct	ed equation to reflect	365 days per year.	
Dianagala	·		· · ·	
Disposals	, M, D;			
Reasons Why Sul		sposed		
Select one or more reason	1S			
Contaminated materials				
On-site Disposal (excluding Tailir	gs and Waste	Rock)	
Click "Edit" to enter your r	eportable values.In ord	ler to calculate totals,	you must click the "Validat	e" button.
On-site Disposal				
Category	Basis Of Es	stimate	Quantity (Tonnes)	

Landfill	NA - Not Applicable	
Land Treatment	NA - Not Applicable	
Underground Injection	NA - Not Applicable	
Total - On-site Disposals		
Off-site Disposal (exclu	ding Tailings and Waste	Rock)
Off-site Disposal		
Category	Basis Of Estimate	Quantity (Tonnes)
Landfill	NA - Not Applicable	
Land Treatment	NA - Not Applicable	
Underground Injection	NA - Not Applicable	
Storage	NA - Not Applicable	
Total - Off-site Disposals		
Off site Transfers (avel	uding Tailings and Mast	o Dools)
•	uding Tailings and Waste reatment Prior to Final D	•
Category	Basis Of Estimate	Quantity (Tonnes)
Physical Treatment	NA - Not Applicable	
Chemical Treatment	O - Engineering Estimates	0.3354
Biological Treatment	NA - Not Applicable	
Incineration / Thermal	NA - Not Applicable	

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Municipal Sewage Treatment Plant	NA - Not Applicable	
Total - Treatment Prior to Final Disp	posal	
0.3354		
Total Quantity Disposed (All Media))	
0.3354		
Choose the Basis of Estimate and of Then enter the quantity transferred	to each off-site in its respective qualign to navigate to the off-site search s"Save and Return".	·
Basis of Estimate for Off	f-sites	
Enter breakdown values for		
Chemical Treatment		
Basis of Estimate		
O - Engineering Estimates		
Quantity (Tonnes)		
0.3354		
Off-site		
Off-Site Name	Quantity (Tonnes)	Address
Detox Environmental Ltd.	0.3354	322 Bennett, Bowmanville, ON, Canada
Total Assigned (must equal total re	ported)	
0.3354		
Reasons for Changes in	Quantities Disposed from	n Previous Year
Select the applicable reason or rea	•	

Other (specify in disposals comment field)

Comments? (Disposals)

Missed HCI disposal within Sn stripper in previous yrs. Weekly dump of Acid Copper Bath solution from Plating lines. Only way determined successful in reducing TOC per process Engineering.

Recycling

Reasons Why Substance Was Recycled

Select one or more reasons. *

Contaminated materials

Off-site Transfers for Recycling

Click "Edit" to enter your reportable values. In order to calculate totals, you must click the "Validate" button.

Off-site Transfers

Category	Basis Of Estimate	Quantity (Tonnes)
Energy Recovery	NA - Not Applicable	
Recovery of Solvents	NA - Not Applicable	
Recovery of Organic Substances (not solvents)	NA - Not Applicable	
Recovery of Metals and Metal Compounds	NA - Not Applicable	
Recovery of Inorganic Materials (not metals)	O - Engineering Estimates	62.643
Recovery of Acids and Bases	NA - Not Applicable	
Recovery of Catalysts	NA - Not Applicable	
Recovery of Pollution Abatement Residues	NA - Not Applicable	
Refining of Re-use of Used Oil	NA - Not Applicable	
Other	NA - Not Applicable	

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Total Quantity Recycled

60	64	2
nz.	n4	٠.٦

Assign Disposals / Transfers to Off-site Facilities

Choose the Basis of Estimate and enter the quantity transferred off-site for disposal in the first Quantity box. Then enter the quantity transferred to each off-site in its respective quantity field. If you need to add an off-site facility to the list, click the "+" sign to navigate to the off-site search screen. When you are finished entering all transfer quantities, click "Save and Return".

Assign Disposals / Transfers to Off-site Facilities

	•			•	\sim	• 4
Basis	\sim t	⊢ ctir	Mata	tor.	/ \tt_	CITAC
Dasis	OI.	-oui	Hate	IUI	OII-	כסווכ:

Enter breakdown values for

Recovery of Inorganic Materials (not metals)

Basis of Estimate

O - Engineering Estimates

Quantity (Tonnes)

62.643

Off-site

Off-Site Name	Quantity (Tonnes)	Address
Micronutrients	62.643	1550 Research Way, Indianapolis, IN, United States

Total Assigned (must equal total reported)

62.643

Reasons for Changes in Quantities Recycled from Previous Year

Select the applicable reason or reasons *

Other (specify in recycling comments field)

Comments? (Recycling)

Etchant Vol increases and N increases by 0.018N.

Comparison Report: Enters, Creation, Contained in Product

Ensure that "Last Reported Quantity" and the "Reporting Period of the last reported quantity" reflect current year's reporting to the last year's values. If you selected the pre-population function, the exact values in your

previous year's report will be inserted into the current year's template, including the comparison report. Therefore, you will be required to update all values and texts.

Enters the fac	ility (Use)			
Enters the fac	ility (Use)			
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
66.61	61.244	2013	5.366	8.76
Creation				
Creation				
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Contained in F				
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Reasons for C Reasons for C Reason(s) for Chang No reasons - quantity (please specify)	change	same		

Comparison Report: On-site Releases

Ensure that "Last Reported Quantity" and the "Reporting Period of the last reported quantity" reflect current year's reporting to the last year's values. If you selected the pre-population function, the exact values in your previous year's report will be inserted into the current year's template, including the comparison report. Therefore, you will be required to update all values and texts.

Total Quantity Released (All Media)

	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0.965	0.811	2013	0.154	18.99
Reasons for C	Change			
Reasons for C	hange			
Reason(s) for Chanç	ре			
Other				
(please specify)				
Minor Emission cald	ulation rate change,	Corrected the operation	nal day to 365 da	ay per year.
(please specify): Mi	nor Emission calcula	ation rate change, Corre	cted the operation	onal day to 365 day per yea
Comparison R	Report: Dispos	als On-site, Off-	site and Ta	ilings and Waste
D I-				
	ported Quentity" and	d the "Penerting Period	of the last rener	tod quantity" roflact ourrant
Ensure that "Last Re year's reporting to th previous year's repo Therefore, you will b	e last year's values. rt will be inserted int e required to update	. •	population functi	•
year's reporting to th previous year's repo	e last year's values. rt will be inserted int e required to update	If you selected the pre- to the current year's tem	population functi	on, the exact values in your
Ensure that "Last Re year's reporting to th previous year's repo Therefore, you will b	e last year's values. rt will be inserted int e required to update Disposals	If you selected the pre- to the current year's tem	population functi	on, the exact values in your
Ensure that "Last Re year's reporting to th previous year's repo Therefore, you will b Total On-site I	e last year's values. rt will be inserted int e required to update Disposals Disposals	If you selected the pre- to the current year's tem	population functi	on, the exact values in your
Ensure that "Last Re year's reporting to the previous year's repo Therefore, you will be Total On-site I Total On-site I Quantity (Tonnes)	e last year's values. rt will be inserted int e required to update Disposals Disposals Last Reported Quantity	If you selected the pre- to the current year's tem e all values and texts. Reporting Period of Last Reported	population functi	on, the exact values in your the comparison report.
Ensure that "Last Revear's reporting to the previous year's report	re last year's values. rt will be inserted int e required to update Disposals Disposals Last Reported Quantity (Tonnes) *	If you selected the pre-	population functing function f	on, the exact values in your the comparison report.
Ensure that "Last Revear's reporting to the previous year's reporting to the previous year's reporting to will be a second or the previous year's reporting to the pr	re last year's values. rt will be inserted int e required to update Disposals Disposals Last Reported Quantity (Tonnes) *	If you selected the pre-	population functing function f	on, the exact values in your the comparison report.
Ensure that "Last Re year's reporting to the previous year's repo Therefore, you will be Total On-site I	re last year's values. rt will be inserted int e required to update Disposals Disposals Last Reported Quantity (Tonnes) *	If you selected the pre-	population functing function f	on, the exact values in your

	iansici ioi tica	imeni Phoi io F	inal Disposal	
Total Off-site t	ransfer for trea	tment Prior to F	inal Disposal	
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0.3354	0.0012	2013	0.3342	27850.0
Total On-site [Disposal of Tail	ings and Waste	Rock	
	Disposal of Tail	•		
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Total Off-site [Disposal of Tail	ings and Waste	Rock	
Total Off-site [Disposal of Tail	ings and Waste	Rock	
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Reasons for C	'hange			
Reasons for C	_			
Trodoctio for C	riarigo			
Reason(s) for Chang	je			
Reason(s) for Chang	je			
Other	je			
Other (please specify)	ge I within Sn Stripper in I	previous years.		
Other (please specify) Missed HCl disposal		•	ous years.	

Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
62.643	59.197	2013	3.446	5.82
Reasons for C	Change			
Reasons for C	Change			
Reason(s) for Chan	ge			
Increase in producti	on levels, Other			
(please specify)				
Etchant volume incr	eased and N increas	se by 0.018N		
			0.049NI	
(please specify): Etc	chant volume increas	sed and N increase by (J.U I OIN	
	chant volume increas	sed and N increase by (J.U I OIN	
7664-93-9, S	ulphuric acid	sed and N increase by (J.U I OIN	
	ulphuric acid	sed and N increase by (J.U I OIN	
7664-93-9, S 7664-93-9, Sulphur	ulphuric acid		J.UTOIN	
7664-93-9, S 7664-93-9, Sulphur Substance Re	ulphuric acid ic acid eporting Status		J.UTOIN	
7664-93-9, S 7664-93-9, Sulphur Substance Re Applicable Pro	ulphuric acid ic acid eporting Status ograms	3		otice? Selecting "No"
7664-93-9, S 7664-93-9, Sulphur Substance Re Applicable Pro	ulphuric acid ic acid eporting Status ograms	teria specified in the Ca		otice? Selecting "No"
7664-93-9, S 7664-93-9, Sulphur Substance Re Applicable Pro	ulphuric acid ic acid eporting Status ograms bstance meet the cri	teria specified in the Ca		otice? Selecting "No"
7664-93-9, S 7664-93-9, Sulphur Substance Re Applicable Pro NPRI - Does this sul ndicates voluntary r Yes ON MOE TRA - Does	ulphuric acid ic acid eporting Status ograms bstance meet the cri reporting of this subs	teria specified in the Ca	nada Gazette no	egulation 455/09 under the
7664-93-9, S 7664-93-9, Sulphur Substance Re Applicable Pro NPRI - Does this sul ndicates voluntary r Yes ON MOE TRA - Does	ulphuric acid ic acid eporting Status ograms bstance meet the cri reporting of this subs	teria specified in the Ca tance to the NPRI. *	nada Gazette no	egulation 455/09 under the
7664-93-9, S 7664-93-9, Sulphur Substance Re Applicable Pro NPRI - Does this sul ndicates voluntary r Yes ON MOE TRA - Doe TRA? Selecting "No	ulphuric acid ic acid eporting Status ograms bstance meet the cri eporting of this subs es this substance me " indicates voluntary	teria specified in the Ca tance to the NPRI. * eet the criteria specified reporting of this substa	inada Gazette no in the Ontario Ronce to the ON M	egulation 455/09 under the
7664-93-9, S 7664-93-9, Sulphur Substance Re Applicable Pro NPRI - Does this sul ndicates voluntary r Yes ON MOE TRA - Doe TRA? Selecting "No	ulphuric acid ic acid eporting Status ograms bstance meet the cri eporting of this subs es this substance me " indicates voluntary	teria specified in the Ca tance to the NPRI. * eet the criteria specified reporting of this substa	inada Gazette no in the Ontario Ronce to the ON M	egulation 455/09 under the
7664-93-9, Sulphur Substance Re Applicable Pro NPRI - Does this sul ndicates voluntary res ON MOE TRA - Doe TRA? Selecting "No Yes s this considered the clarification) *	ulphuric acid ic acid eporting Status ograms bstance meet the cri eporting of this subs es this substance me " indicates voluntary e first report for this	teria specified in the Ca tance to the NPRI. * eet the criteria specified reporting of this substa	in the Ontario Ronce to the ON M	egulation 455/09 under the

General Information about the Substance
Releases and Transfers of the Substance
Releases and Transfers of the Substance
Was the substance released on-site? *
Yes
If the substance was released on-site and the total quantity released was less than one tonne, select the check-box below
The substance will be reported as the sum of releases to all media (total of 1 tonne or less).
Disposals and Off-site Transfers for Recycling
Was the substance disposed of (on-site or off-site), or transferred for treatment prior to final disposal? *
Yes
Is the facility required to report on disposals of tailings and waste rock for the selected reporting period? *
No
Was the substance transferred off-site for recycling? *
No
Nature of Activities *
Indicate whether the substance was manufactured, processed, or otherwise used, by selecting the nature of such activities.
Manufacture the Substance
Process the Substance
As a reactant
Otherwise Use of the Substance
As a physical or chemical processing aid
TRA Quantifications

Enters the facility (Use), Creation, Contained in Product for ON MOE TRA Enters the facility (Use)

The amount of substance that enters a process as the substance itself or part of another substance, rolled up at the facility level.

Quantity (Tonnes) **

107.04
Do you want to use ranges for public reporting? If "No" is selected you are indicating that any report to the public may contain the exact quantity provided. *
Yes
Creation
The amount of substance that is created
Quantity (Tonnes) **
0
Do you want to use ranges for public reporting? If "No" is selected you are indicating that any report to the public may contain the exact quantity provided. *
Yes
Contained in Product
Contained in Product The amount of substance contained in product
Quantity (Tonnes) **
0
Do you want to use ranges for public reporting? If "No" is selected you are indicating that any report to the public may contain the exact quantity provided. *
Yes
Change in Method of Quantification
There has been a change in the method or combination of methods used to track and quantify the substance during the previous calendar year
Describe the changes **
Select the reason for change: **
Describe how the change impact tracking and quantification of the substance **

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Incidents out of th	e norn	nal course of	events				
	There have been incidents out of the normal course of events that occurred at the facility during the previous calendar year that affected the results of tracking/quantification of this substance.						
Explain how tracking and	quantifica	ations were affecte	ed **				
Significant Proces	s Cha	nge					
☐ There has been a s	There has been a significant process change at the facility during the previous calendar year.						
On-site Releases							
Click "Edit" to enter your re	eportable	values.In order to	calculate totals, y	ou must c	lick the "Validate" button.		
Total Quantity Rel	eased	I (All Media)					
Releases to All Media							
Category		Basis Of Estimate		Quantity (Tonnes)			
Total Quantity Released		O - Engineering Estimates		0.0003			
Breakdown of Annual Releases							
☐ Distribute Equally							
Quarterly Breakdown *							
Jan - Mar %	Apr - J	un % Jul - Sep %			Oct - Dec %		
25	25		25		25		
Total %							
100							
December Changes in Overtities Delegand from Dravious Veer							
Reasons for Changes in Quantities Released from Previous Year Select the applicable reason or reasons *							
No significant change (i.e.							
<u> </u>	•						
Comments ? (On-Site Releases) **							
Disposals							
Reasons Why Sul	ostanc	e Was Dispo	sed				

Select one or more reasons

Contaminated materials		
On-site Disposal (ex	cluding Tailings and Wa	ste Rock)
	rtable values.In order to calculate to	otals, you must click the "Validate" button.
On-site Disposal		
Category	Basis Of Estimate	Quantity (Tonnes)
Landfill	NA - Not Applicable	
Land Treatment	NA - Not Applicable	
Underground Injection	NA - Not Applicable	
Total - On-site Disposals		
Off-site Disposal (ex Off-site Disposal	cluding Tailings and Wa	ste Rock)
Category	Basis Of Estimate	Quantity (Tonnes)
Landfill	NA - Not Applicable	
Land Treatment	NA - Not Applicable	
Underground Injection	NA - Not Applicable	
Storage	NA - Not Applicable	
Total - Off-site Disposals		
Off-site Transfers (ex	xcluding Tailings and Wa	aste Rock)
Off-site Transfers for	r Treatment Prior to Fina	al Disposal
Category	Basis Of Estimate	Quantity (Tonnes)

NA - Not Applicable

Physical Treatment

Chemical Treatment	O - Engineering Estimates	16.69
Biological Treatment	NA - Not Applicable	
Diological Treatment	14A - Not Applicable	
Incineration / Thermal	NA - Not Applicable	
Municipal Sewage Treatment Plant	NA - Not Applicable	
Total - Treatment Prior to Final Dis	posal	
16.69		
Total Quantity Disposed (All Media)	
16.69		
·	-site Facilities	•
Enter breakdown values for		
Chemical Treatment		
Basis of Estimate		
O - Engineering Estimates		
Quantity (Tonnes)		
16.69		
Off-site		
Off-Site Name	Quantity (Tonnes)	Address
Detox Environmental Ltd.	16.69	322 Bennett, Bowmanville, ON, Canada

Total Assigned (must equal total reported)

16.69

Reasons for Changes in Quantities Disposed from Previous Year

Select the applicable reason or reasons.

Other (specify in disposals comment field)

Comments? (Disposals)

Weekly Dump of Acid Copper bath solution from Plating Lines. Only way Determined successful in reducing TOC per process eng.

Recycling

Reasons for Changes in Quantities Recycled from Previous Year

Select the applicable reason or reasons *

No significant change (i.e. < 10%) or no change

Comments? (Recycling)

Comparison Report: Enters, Creation, Contained in Product

Ensure that "Last Reported Quantity" and the "Reporting Period of the last reported quantity" reflect current year's reporting to the last year's values. If you selected the pre-population function, the exact values in your previous year's report will be inserted into the current year's template, including the comparison report. Therefore, you will be required to update all values and texts.

Enters the facility (Use)

Enters the facility (Use)

Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
107.04	93.638	2013	13.402	14.31

Creation

Creation

Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	

Contained in Product

Contained in Product

Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	

Reasons for Change

Reasons for Change

Reason(s) for Change

Implementation of actions outside of toxics reduction plan, Other

(please specify)

Significant process change. 9.3 MT of Sulfuric Acid used for Plating make up due to weekly dump of Acid Copper Bath solutuion.

(please specify): Significant process change. 9.3 MT of Sulfuric Acid used for Plating make up due to weekly dump of Acid Copper Bath solutuion.

Comparison Report: On-site Releases

Ensure that "Last Reported Quantity" and the "Reporting Period of the last reported quantity" reflect current year's reporting to the last year's values. If you selected the pre-population function, the exact values in your previous year's report will be inserted into the current year's template, including the comparison report. Therefore, you will be required to update all values and texts.

Total Quantity Released (All Media)

Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0.0003	0.0003	2013	0.0000	0

Reasons for Change

Reasons for Change

Reason(s) for Change

No reasons - quantities approximately the same

(please specify)

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

Ensure that "Last Reported Quantity" and the "Reporting Period of the last reported quantity" reflect current year's reporting to the last year's values. If you selected the pre-population function, the exact values in your previous year's report will be inserted into the current year's template, including the comparison report. Therefore, you will be required to update all values and texts.

Total On-site	Disposaio			
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Total Off-site	Disposals			
Total Off-site	Disposals			
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
	-			
		atment Prior to I		_
Total Off-site	transfer for tre	atment Prior to I	Final Dispos	_
Total Off-site t	transfer for tre transfer for tre Last Reported Quantity	atment Prior to I atment Prior to I Reporting Period of Last Reported	Final Dispos	sal
Total Off-site to Total Off-site to Quantity (Tonnes)	transfer for tre transfer for tre Last Reported Quantity (Tonnes) *	atment Prior to I atment Prior to I Reporting Period of Last Reported Quantity *	Final Dispos Final Dispos Change 7.991	% Change
Total Off-site total	transfer for tre transfer for tre Last Reported Quantity (Tonnes) *	atment Prior to I atment Prior to I Reporting Period of Last Reported Quantity *	Final Dispos Final Dispos Change 7.991 Proceedings of the Rock	% Change
Total Off-site total	transfer for tre transfer for tre Last Reported Quantity (Tonnes) *	atment Prior to I atment Prior to I Reporting Period of Last Reported Quantity * 2013 ailings and Waste	Final Dispos Final Dispos Change 7.991 Proceedings of the Rock	% Change

Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Reasons for C	Change			
Reasons for C	Change			
Reason(s) for Chanç	•			
Implementation of a	ctions outside of tox	ics reduction plan, Othe	r	
(please specify)				
	id Copper Bath solut	ion from plating line due	to Quality issue	25
7697-37-2, N	itric acid	Copper Bath solution fro		
7697-37-2, N 7697-37-2, Nitric ac Substance Re	itric acid			,
7697-37-2, N 7697-37-2, Nitric ac Substance Re Applicable Pro	itric acid eporting Status ograms	teria specified in the Ca	nada Gazette no	,
7697-37-2, N 7697-37-2, Nitric ac Substance Re Applicable Pro	itric acid eporting Status ograms bstance meet the cri	teria specified in the Ca	nada Gazette no	,
7697-37-2, N 7697-37-2, Nitric ac Substance Re Applicable Pro NPRI - Does this sul indicates voluntary r Yes ON MOE TRA - Doe	itric acid eporting Status ograms bstance meet the cri eporting of this subs	teria specified in the Ca	in the Ontario R	otice? Selecting "No"
7697-37-2, N 7697-37-2, Nitric ac Substance Re Applicable Pro NPRI - Does this sul indicates voluntary re Yes	itric acid eporting Status ograms bstance meet the cri eporting of this subs	teria specified in the Ca tance to the NPRI. *	in the Ontario R	otice? Selecting "No"
7697-37-2, N 7697-37-2, Nitric ac Substance Re Applicable Pro NPRI - Does this sul indicates voluntary re Yes ON MOE TRA - Doe TRA? Selecting "No	itric acid eporting Status ograms bstance meet the cri eporting of this subs es this substance me " indicates voluntary	teria specified in the Ca tance to the NPRI. * eet the criteria specified reporting of this substa	in the Ontario R nce to the ON M	otice? Selecting "No"
7697-37-2, Normal Research Res	itric acid eporting Status ograms bstance meet the cri eporting of this subs es this substance me " indicates voluntary	teria specified in the Ca tance to the NPRI. * eet the criteria specified reporting of this substa	in the Ontario R nce to the ON M	otice? Selecting "No" egulation 455/09 under the
7697-37-2, Normalization of the considered the clarification of the considered the considered the clarification of the considered the clarification of the considered the considered the clarification of the considered the conside	itric acid eporting Status ograms bstance meet the cri eporting of this subs es this substance me " indicates voluntary e first report for this	teria specified in the Ca tance to the NPRI. * eet the criteria specified reporting of this substa	in the Ontario R nce to the ON M DE TRA? (Pleas	otice? Selecting "No" egulation 455/09 under the

General Information about the Substance
Releases and Transfers of the Substance
Releases and Transfers of the Substance
Was the substance released on-site? *
Yes
If the substance was released on-site and the total quantity released was less than one tonne, select the check-box below
The substance will be reported as the sum of releases to all media (total of 1 tonne or less).
Disposals and Off-site Transfers for Recycling
Was the substance disposed of (on-site or off-site), or transferred for treatment prior to final disposal? *
Yes
Is the facility required to report on disposals of tailings and waste rock for the selected reporting period? *
No
Was the substance transferred off-site for recycling? *
No
Nature of Activities *
Indicate whether the substance was manufactured, processed, or otherwise used, by selecting the nature of such activities.
Manufacture the Substance
Process the Substance
As a reactant
Otherwise Use of the Substance
As a physical or chemical processing aid
TRA Quantifications
Enters the facility (Use), Creation, Contained in Product for ON MOE TRA
Enters the facility (Use)

The amount of substance that enters a process as the substance itself or part of another substance, rolled up at the facility level.

Quantity (Tonnes) **

23.28
Do you want to use ranges for public reporting? If "No" is selected you are indicating that any report to the public may contain the exact quantity provided. *
Yes
Creation
The amount of substance that is created
Quantity (Tonnes) **
0
Do you want to use ranges for public reporting? If "No" is selected you are indicating that any report to the public may contain the exact quantity provided. *
Yes
Contained in Product
The amount of substance contained in product
Quantity (Tonnes) **
0
Do you want to use ranges for public reporting? If "No" is selected you are indicating that any report to the public may contain the exact quantity provided. *
Yes
Change in Method of Quantification
There has been a change in the method or combination of methods used to track and quantify the substance during the previous calendar year
Describe the changes **
Select the reason for change: **
Describe how the change impact tracking and quantification of the substance **

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Incidents out of the nor	mal course of events	
There have been incidents previous calendar year that	out of the normal course of events affected the results of tracking/qua	that occurred at the facility during the antification of this substance.
Explain how tracking and quantific	cations were affected **	
Significant Process Cha	ange	
☐ There has been a significar	nt process change at the facility du	ring the previous calendar year.
On-site Releases		
Click "Edit" to enter your reportable	e values.In order to calculate totals	s, you must click the "Validate" button.
Enter the values for rele	eases to air for the subs	tance
Releases to Air		
Category	Basis Of Estimate	Quantity (Tonnes)
Stack or Point Releases	O - Engineering Estimates	1.246
Storage or Handling Releases	NA - Not Applicable	
Fugitive Releases	NA - Not Applicable	
Spills	NA - Not Applicable	
Other Non-point Releases	NA - Not Applicable	
Total - Releases to Air		
1.246		
Enter the values for rele	eases to water bodies	
Releases to Water Bod	ies	
Category	Basis Of Estimate	Quantity (Tonnes)
Direct Discharges	NA - Not Applicable	
Spills	NA - Not Applicable	

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Leaks	NA - Not A	Applicable	
Total - Releases to Water	Bodies		
Enter the values for	or releases to I	and (surface and	d underground)
Releases to Land	(the nature of	"Other" releases	must be specified in the
Comments)			
Category	Basis Of E	Estimate	Quantity (Tonnes)
Spills	NA - Not A	Applicable	
Leaks	NA - Not A	Applicable	
Other	NA - Not A	Applicable	
Total - Releases to Land			
Total Quantity Released			
1.246			
Breakdown of Ann Distribute Equally			
Quarterly Breakdo Jan - Mar %	Apr - Jun %	Jul - Sep %	Oct - Dec %
	-	•	
25	25	25	25
Total %			
100			
Reasons for Chan	ges in Quantiti	ies Released fro	m Previous Year
Select the applicable reason	on or reasons *		
No significant change (i.e.	< 10%) or no change	е	

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Comments ? (On-Site Releases) **

Disposals		
Reasons Why Subs	stance Was Disposed	
Select one or more reasons		
Contaminated materials		
On-site Disposal (e	xcluding Tailings and Wa	ste Rock)
• •		otals, you must click the "Validate" buttor
On-site Disposal		
Category	Basis Of Estimate	Quantity (Tonnes)
Landfill	NA - Not Applicable	
Land Treatment	NA - Not Applicable	
Underground Injection	NA - Not Applicable	
Underground Injection Fotal - On-site Disposals	NA - Not Applicable	
Total - On-site Disposals Off-site Disposal (e	NA - Not Applicable xcluding Tailings and Wa	ste Rock)
Total - On-site Disposals Off-site Disposal (e	xcluding Tailings and Wa	,
Total - On-site Disposals Off-site Disposal (e: Off-site Disposal Category	xcluding Tailings and Wa	ste Rock) Quantity (Tonnes)
Total - On-site Disposals Off-site Disposal (e: Off-site Disposal Category	xcluding Tailings and Wa	,
Off-site Disposals Off-site Disposal (e: Off-site Disposal Category Landfill	xcluding Tailings and Wa	,
Total - On-site Disposals Off-site Disposal (e. Disposal Category Landfill Land Treatment	xcluding Tailings and Wa Basis Of Estimate NA - Not Applicable	,
Total - On-site Disposals Off-site Disposal (e	xcluding Tailings and Wa Basis Of Estimate NA - Not Applicable NA - Not Applicable	,

Off-site Transfers (excluding Tailings and Waste Rock)

Off-site Transfers for Treatment Prior to Final Disposal

Category	Basis Of Estimate	Quantity (Tonnes)
Physical Treatment	NA - Not Applicable	
Chemical Treatment	O - Engineering Estimates	14.59
Biological Treatment	NA - Not Applicable	
Incineration / Thermal	NA - Not Applicable	
Municipal Sewage Treatment Plant	NA - Not Applicable	
Total - Treatment Prior to Final Disp	oosal	
14.59		
Total Quantity Disposed (All Media)		
14.59		

Assign Disposals / Transfers to Off-site Facilities

Choose the Basis of Estimate and enter the quantity transferred off-site for disposal in the first Quantity box. Then enter the quantity transferred to each off-site in its respective quantity field. If you need to add an offsite facility to the list, click the "+" sign to navigate to the off-site search screen. When you are finished entering all transfer quantities, click "Save and Return".

Assign Disposals / Transfers to Off-site Facilities

asis of Estimate for Off-sites	
nter breakdown values for	
hemical Treatment	
asis of Estimate	
- Engineering Estimates	
uantity (Tonnes)	
4.59	

Off-site

Off-Site Name	Quantity (Tonnes)	Address
Detox Environmental Ltd.	14.59	322 Bennett, Bowmanville, ON, Canada

Total Assigned (must equal total reported)

14.59

Reasons for Changes in Quantities Disposed from Previous Year

Select the applicable reason or reasons.

Changes in production levels, Other (specify in disposals comment field)

Comments? (Disposals)

Slightly More Tin Stripper disposed of via Detox.

Recycling

Reasons for Changes in Quantities Recycled from Previous Year

Select the applicable reason or reasons *

No significant change (i.e. < 10%) or no change

Comments? (Recycling)

Comparison Report: Enters, Creation, Contained in Product

Ensure that "Last Reported Quantity" and the "Reporting Period of the last reported quantity" reflect current year's reporting to the last year's values. If you selected the pre-population function, the exact values in your previous year's report will be inserted into the current year's template, including the comparison report. Therefore, you will be required to update all values and texts.

Enters the facility (Use)

Enters the facility (Use)

Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change	
23.28	20.505	2013	2.775	13.53	

Creation

Creation

Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Contained in F	Product			
Contained in F	Product			
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Reasons for C	Change			
Reasons for C	Change			
Reason(s) for Chang	ge			
	on levels, Other			

(please specify)

Bought 1.3 MT more Nitric in Sn Stripper, Bought more 25% and 50% Nitric Acid as well to ensure effective Ni tank cleaning

(please specify): Bought 1.3 MT more Nitric in Sn Stripper, Bought more 25% and 50% Nitric Acid as well to ensure effective Ni tank cleaning

Comparison Report: On-site Releases

Ensure that "Last Reported Quantity" and the "Reporting Period of the last reported quantity" reflect current year's reporting to the last year's values. If you selected the pre-population function, the exact values in your previous year's report will be inserted into the current year's template, including the comparison report. Therefore, you will be required to update all values and texts.

Total Releases to Air

Total Releases to Air

Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
1.246	1.201	2013	0.045	3.75

Total Releases to Water

Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Total Release	s to Land			
Total Release				
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Reasons for C	:hange			
Reasons for C				
Reason(s) for Chang	•			
` ,	ties approximately the	e same		
(please specify)				
Comparison R	enort: Disnos:	als On-site Off-	site and Tai	lings and Waste
Rock	toport. Diopoot	alo off oilo, off	one and rai	migo and vvaolo
Ensure that "Last Re year's reporting to th previous year's repo	e last year's values.l	f you selected the pre- the current year's tem	population function	red quantity" reflect curren on, the exact values in you he comparison report.
Total On-site I	Disposals			
Total On-site I	Disposals			
Total Off-Site I	Last Reported	Reporting Period	Change	% Change
Quantity (Tonnes)	Quantity (Tonnes) *	of Last Reported Quantity *		
	Quantity		0	
Quantity (Tonnes)	Quantity (Tonnes) *	Quantity *	0	
Quantity (Tonnes)	Quantity (Tonnes) *	Quantity *	0	

Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Total Off-site t	ransfer for trea	tment Prior to F	inal Disposal	
		tment Prior to F	•	
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
14.59	12.441	2013	2.149	17.27
Total On-site I	Disposal of Tail	ings and Waste	Rock	
Total On-site I	Disposal of Tail	ings and Waste	Rock	
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Total Off-site I	Disposal of Tail	ings and Waste	Rock	
Total Off-site I	Disposal of Tail	ings and Waste	Rock	
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Reasons for C	Change			
Reasons for C	hange			
Reason(s) for Chang	ge			
Increase in production	on levels, Other			
(please specify)				
~10% increase in pr strip the Nickle tank	oduction. More Tin Str	ripper disposed of via [Detox, and more acid	used to effectively

(please specify): ~10% increase in production. More Tin Stripper disposed of via Detox, and more acid used to effectively strip the Nickle tank

NA - 06, Copper (and its compounds)
NA - 06, Copper (and its compounds)
Substance Reporting Status
Applicable Programs
NPRI - Does this substance meet the criteria specified in the Canada Gazette notice? Selecting "No" indicates voluntary reporting of this substance to the NPRI. *
Yes
ON MOE TRA - Does this substance meet the criteria specified in the Ontario Regulation 455/09 under the TRA? Selecting "No" indicates voluntary reporting of this substance to the ON MOE. *
Yes
Is this considered the first report for this substance to the ON MOE TRA? (Please select "Help" for further clarification) *
No
Would you like to create an exit record for this ON MOE TRA substance? *
No
Comments
General Information about the Substance
Releases and Transfers of the Substance
Releases and Transfers of the Substance
Was the substance released on-site? *
No
If the substance was released on-site and the total quantity released was less than one tonne, select the check-box below
The substance will be reported as the sum of releases to all media (total of 1 tonne or less).
Disposals and Off-site Transfers for Recycling
Was the substance disposed of (on-site or off-site), or transferred for treatment prior to final disposal? *
Yes

Is the facility required to report on disposals of tailings and waste rock for the selected reporting period? *

No
Was the substance transferred off-site for recycling? *
Yes
Nature of Activities *
Indicate whether the substance was manufactured, processed, or otherwise used, by selecting the nature of such activities.
Manufacture the Substance
Process the Substance
As a reactant, As an article component
Otherwise Use of the Substance
TRA Quantifications Enters the facility (Use), Creation, Contained in Product for ON MOE TRA
Enters the facility (Use)
The amount of substance that enters a process as the substance itself or part of another substance, rolled up at the facility level.
Quantity (Tonnes) **
164.76
Do you want to use ranges for public reporting? If "No" is selected you are indicating that any report to the public may contain the exact quantity provided. *
Yes
Creation
The amount of substance that is created
Quantity (Tonnes) **
0

Do you want to use ranges for public reporting? If "No" is selected you are indicating that any report to the public may contain the exact quantity provided. *

Yes
Contained in Product
The amount of substance contained in product
Quantity (Tonnes) **
35.95
Do you want to use ranges for public reporting? If "No" is selected you are indicating that any report to the public may contain the exact quantity provided. *
Yes
Change in Method of Quantification
There has been a change in the method or combination of methods used to track and quantify the substance during the previous calendar year
Describe the changes **
Select the reason for change: **
Describe how the change impact tracking and quantification of the substance **
Incidents out of the normal course of events
There have been incidents out of the normal course of events that occurred at the facility during the previous calendar year that affected the results of tracking/quantification of this substance.
Explain how tracking and quantifications were affected **
Significant Process Change
There has been a significant process change at the facility during the previous calendar year.
On-site Releases
Click "Edit" to enter your reportable values. In order to calculate totals, you must click the "Validate" button.
Reasons for Changes in Quantities Released from Previous Year
Select the applicable reason or reasons *
No significant change (i.e. < 10%) or no change

Comments ? (On-Site Releases) **		
Disposals		
Reasons Why Substanc	e Was Disposed	
Select one or more reasons		
Production residues, Contaminated	d materials, Pollution abatement resid	dues
On-site Disposal (exclud	ling Tailings and Waste F	Rock)
•	values.In order to calculate totals, y	•
On-site Disposal		
Category	Basis Of Estimate	Quantity (Tonnes)
Landfill	NA - Not Applicable	
Land Treatment	NA - Not Applicable	
Underground Injection	NA - Not Applicable	
Total - On-site Disposals		
	ling Tailings and Waste F	Rock)
Off-site Disposal		
Category	Basis Of Estimate	Quantity (Tonnes)
Landfill	NA - Not Applicable	
Land Treatment	NA - Not Applicable	
Underground Injection	NA - Not Applicable	
Storage	NA - Not Applicable	
Total - Off-site Disposals		

Off-site Transfers (excluding Tailings and Waste Rock)

Off-site Transfers for Treatment Prior to Final Disposal

Category	Basis Of Estimate	Quantity (Tonnes)
Physical Treatment	NA - Not Applicable	
Chemical Treatment	O - Engineering Estimates	9.635
Biological Treatment	NA - Not Applicable	
Incineration / Thermal	NA - Not Applicable	
Municipal Sewage Treatment Plant	O - Engineering Estimates	0.072
Total - Treatment Prior to Final Disp	oosal	
9.707		
Total Quantity Disposed (All Media)		
9.707		

Assign Disposals / Transfers to Off-site Facilities

Choose the Basis of Estimate and enter the quantity transferred off-site for disposal in the first Quantity box. Then enter the quantity transferred to each off-site in its respective quantity field. If you need to add an offsite facility to the list, click the "+" sign to navigate to the off-site search screen. When you are finished entering all transfer quantities, click "Save and Return".

Assign Disposals / Transfers to Off-site Facilities

Basis of Estimate for Off-sites	
nter breakdown values for	
Chemical Treatment	
asis of Estimate	
) - Engineering Estimates	
uantity (Tonnes)	
.635	

Off-site

Off-Site Name	Quantity (Tonnes)	Address
Detox Environmental Ltd.	9.635	322 Bennett, Bowmanville, ON, Canada

Total Assigned (must equal total reported)

9.635

Assign Disposals / Transfers to Off-site Facilities

Choose the Basis of Estimate and enter the quantity transferred off-site for disposal in the first Quantity box. Then enter the quantity transferred to each off-site in its respective quantity field. If you need to add an off-site facility to the list, click the "+" sign to navigate to the off-site search screen. When you are finished entering all transfer quantities, click "Save and Return".

Assign Disposals / Transfers to Off-site Facilities

Basis of Estimate for Off-sites

Enter breakdown values for

Municipal Sewage Treatment Plant

Basis of Estimate

O - Engineering Estimates

Quantity (Tonnes)

0.072

Off-site

Off-Site Name	Quantity (Tonnes)	Address
Highland Creek Water Treatment Plant	0.072	1160 Highland Creek W., Toronto, ON, Canada

Total Assigned (must equal total reported)

0.072

Reasons for Changes in Quantities Disposed from Previous Year

Select the applicable reason or reasons.

Changes in production levels, Other (specify in disposals comment field)

Comments? (Disposals)

0.6 MT Came from the frequent dump of Acid Copper Bath solution which goes to Detox.

Recycling

Reasons Why Substance Was Recycled

Select one or more reasons. *

Production Residues, Contaminated materials, Unusable parts or discards, Pollution abatement residues, Machine or finishing residues

Off-site Transfers for Recycling

Click "Edit" to enter your reportable values. In order to calculate totals, you must click the "Validate" button.

Off-site Transfers

Category	Basis Of Estimate	Quantity (Tonnes)
Energy Recovery	NA - Not Applicable	
Recovery of Solvents	NA - Not Applicable	
Recovery of Organic Substances not solvents)	NA - Not Applicable	
ecovery of Metals and Metal ompounds	O - Engineering Estimates	118.488
Recovery of Inorganic Materials not metals)	NA - Not Applicable	
Recovery of Acids and Bases	NA - Not Applicable	
Recovery of Catalysts	NA - Not Applicable	
ecovery of Pollution Abatement esidues	NA - Not Applicable	
refining of Re-use of Used Oil	NA - Not Applicable	
Other	NA - Not Applicable	
otal Quantity Recycled		
18.488		

Assign Disposals / Transfers to Off-site Facilities

Choose the Basis of Estimate and enter the quantity transferred off-site for disposal in the first Quantity box. Then enter the quantity transferred to each off-site in its respective quantity field. If you need to add an off-site facility to the list, click the "+" sign to navigate to the off-site search screen. When you are finished entering all transfer quantities, click "Save and Return".

Assign Disposals / Transfers to Off-site Facilities

Basis of Estimate for Off-sites

Enter breakdown values for

Recovery of Metals and Metal Compounds

Basis of Estimate

O - Engineering Estimates

Quantity (Tonnes)

118.488

Off-site

Off-Site Name	Quantity (Tonnes)	Address
Reldan Metals, LLC	25.415	550 Old Bordentown Road, , Fairless Hills, PA, USA
Micronutrients	66.953	1550 Research Way, Indianapolis, IN, United States
Combined Metal Industries Inc.	26.12	505 B Garyray Dr., Weston, ON, Canada

Total Assigned (must equal total reported)

118.488

Reasons for Changes in Quantities Recycled from Previous Year

Select the applicable reason or reasons *

Changes in production levels, Other (specify in recycling comments field)

Comments? (Recycling)

More Cupric etchant was sent out for recycling, include the remainder of solution in the bulk tank at the end of the year.

Comparison Report: Enters, Creation, Contained in Product

Ensure that "Last Reported Quantity" and the "Reporting Period of the last reported quantity" reflect current year's reporting to the last year's values. If you selected the pre-population function, the exact values in your previous year's report will be inserted into the current year's template, including the comparison report. Therefore, you will be required to update all values and texts.

	ility (Use)			
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
164.76	157.120	2013	7.640	4.86
Creation				
Creation				
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Contained in F	Product Last Reported Quantity	Reporting Period of Last Reported	Change	% Change
Contained in F Quantity (Tonnes)	Product Last Reported		Change 2.694	% Change 8.10
Contained in F Quantity (Tonnes) 35.95	Last Reported Quantity (Tonnes) *	of Last Reported Quantity *		
Contained in F Quantity (Tonnes) 35.95 Reasons for C	Change	of Last Reported Quantity *		
Contained in F Quantity (Tonnes) 35.95 Reasons for C Reasons for C	Last Reported Quantity (Tonnes) * 33.256 Change Change	of Last Reported Quantity *	_	
Contained in F Quantity (Tonnes) 35.95 Reasons for C Reasons for C	Last Reported Quantity (Tonnes) * 33.256 Change Change	of Last Reported Quantity *	_	
Reasons for C Reason(s) for Change	Last Reported Quantity (Tonnes) * 33.256 Change Change	of Last Reported Quantity *	_	

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Rock

Ensure that "Last Reported Quantity" and the "Reporting Period of the last reported quantity" reflect current year's reporting to the last year's values. If you selected the pre-population function, the exact values in your previous year's report will be inserted into the current year's template, including the comparison report. Therefore, you will be required to update all values and texts.

Total On-site I	Disposals			
Total On-site I	Disposals			
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Total Off-site I	Disposals			
Total Off-site I	Disposals			
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Total Off-site t		tment Prior to F	•	sal
Total Off-site t			inal Dispos	sal
	transfer for trea Last Reported Quantity (Tonnes) *	tment Prior to F Reporting Period of Last Reported Quantity *		
Total Off-site t	Last Reported Quantity	Reporting Period of Last Reported	inal Dispos	sal
Total Off-site to Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Final Dispos Change	% Change
Total Off-site to Quantity (Tonnes) 9.707 Total On-site I	Last Reported Quantity (Tonnes) * 7.979 Disposal of Tail	Reporting Period of Last Reported Quantity * 2013 ings and Waste	Change 1.728 Rock	% Change
Total Off-site to Quantity (Tonnes) 9.707 Total On-site I	Last Reported Quantity (Tonnes) * 7.979 Disposal of Tail	Reporting Period of Last Reported Quantity *	Change 1.728 Rock	% Change
Total Off-site to Quantity (Tonnes) 9.707 Total On-site I	Last Reported Quantity (Tonnes) * 7.979 Disposal of Tail	Reporting Period of Last Reported Quantity * 2013 ings and Waste	Change 1.728 Rock	% Change
Total Off-site to Quantity (Tonnes) 9.707 Total On-site In Total On-site	Last Reported Quantity (Tonnes) * 7.979 Disposal of Tail Disposal of Tail Last Reported Quantity	Reporting Period of Last Reported Quantity * 2013 ings and Waste ings and Waste Reporting Period of Last Reported	Final Dispos Change 1.728 Rock Rock	% Change 21.66
Total Off-site to Quantity (Tonnes) 9.707 Total On-site In Total On-site In Quantity (Tonnes)	Last Reported Quantity (Tonnes) * 7.979 Disposal of Tail Disposal of Tail Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity * 2013 ings and Waste ings and Waste Reporting Period of Last Reported Quantity *	Tinal Dispos Change 1.728 PROCK ROCK Change	% Change 21.66
Total Off-site to Quantity (Tonnes) 9.707 Total On-site In Total On-site In Quantity (Tonnes) Total Off-site In In Total Off-site In	Last Reported Quantity (Tonnes) * 7.979 Disposal of Tail Disposal of Tail Last Reported Quantity (Tonnes) * 0 Disposal of Tail	Reporting Period of Last Reported Quantity * 2013 ings and Waste Reporting Period of Last Reported Quantity * 2013 ings and Waste Reported Quantity *	Change 1.728 PROCK PROCK Change 0 ROCK	% Change 21.66
Total Off-site to Quantity (Tonnes) 9.707 Total On-site In Total On-site In Quantity (Tonnes) Total Off-site In In Total Off-site In	Last Reported Quantity (Tonnes) * 7.979 Disposal of Tail Disposal of Tail Last Reported Quantity (Tonnes) * 0 Disposal of Tail Disposal of Tail	Reporting Period of Last Reported Quantity * 2013 ings and Waste ings and Waste Reporting Period of Last Reported Quantity * 2013 ings and Waste ings and Waste ings and Waste Reported Quantity *	Einal Dispos Change 1.728 Rock Rock Change 0 Rock Rock Rock	% Change 21.66 % Change
Total Off-site to Quantity (Tonnes) 9.707 Total On-site In Total On-site In Quantity (Tonnes) Total Off-site In In Total Off-site In	Last Reported Quantity (Tonnes) * 7.979 Disposal of Tail Disposal of Tail Last Reported Quantity (Tonnes) * 0 Disposal of Tail	Reporting Period of Last Reported Quantity * 2013 ings and Waste Reporting Period of Last Reported Quantity * 2013 ings and Waste Reported Quantity *	Change 1.728 PROCK PROCK Change 0 ROCK	% Change

0	0	2013	0	
Reasons for C	hange			
Reasons for C	hange			
Reason(s) for Chang	ge			
Increase in production	on levels, Abnormal in	cident occurred at fac	cility in the current repo	orting year, Other
(please specify)				
0.6 MT of Acid copp	er was disposed due	to weekly dumps of A	cid Copper Bath soluti	on for Quality reason.
(please specify): 0.6 Quality reason.	6 MT of Acid copper w	as disposed due to w	eekly dumps of Acid C	Copper Bath solution for
Ensure that "Last Re year's reporting to the previous year's reporting the year's reportin	ported Quantity" and e last year's values.If	you selected the pre- the current year's tem	of the last reported qu	e exact values in your
Total off-site T	ransfers for Re	ecycling		
Total off-site T	ransfers for Re	ecycling		
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
118.488	115.885	2013	2.603	2.25
Reasons for C	hange			
Reasons for C	_			
Reason(s) for Chang	ge			
Increase in production	on levels			
(please specify)				
NA - 08, Lead	d (and its comp	ounds)		
NA - 08, Lead (and	its compounds)	•		
Substance Re	porting Status			

Applicable Programs
NPRI - Does this substance meet the criteria specified in the Canada Gazette notice? Selecting "No" indicates voluntary reporting of this substance to the NPRI. *
Yes
ON MOE TRA - Does this substance meet the criteria specified in the Ontario Regulation 455/09 under the TRA? Selecting "No" indicates voluntary reporting of this substance to the ON MOE. *
Yes
Is this considered the first report for this substance to the ON MOE TRA? (Please select "Help" for further clarification) *
No
Would you like to create an exit record for this ON MOE TRA substance? *
No
Comments
General Information about the Substance
Releases and Transfers of the Substance
Releases and Transfers of the Substance
Was the substance released on-site? *
Yes
Disposals and Off-site Transfers for Recycling
Was the substance disposed of (on-site or off-site), or transferred for treatment prior to final disposal? *
Yes
Is the facility required to report on disposals of tailings and waste rock for the selected reporting period? *
No
Was the substance transferred off-site for recycling? *

Nature of Activities *

Indicate whether the substance was manufactured, processed, or otherwise used, by selecting the nature of such activities.

Manufacture the Substance

Yes

Process the Substance
As a reactant, As an article component
Otherwise Use of the Substance
Otherwise use of the Substance
TRA Quantifications
Enters the facility (Use), Creation, Contained in Product for ON MOE TRA
Enters the facility (Use)
The amount of substance that enters a process as the substance itself or part of another substance, rolled u at the facility level.
Quantity (kg) **
853.846
Do you want to use ranges for public reporting? If "No" is selected you are indicating that any report to the public may contain the exact quantity provided. *
Yes
Creation The amount of substance that is created
Quantity (kg) **
0
Do you want to use ranges for public reporting? If "No" is selected you are indicating that any report to the public may contain the exact quantity provided. *
Yes
Contained in Product
The amount of substance contained in product
Quantity (kg) **
146.529

Do you want to use ranges for public reporting? If "No" is selected you are indicating that any report to the public may contain the exact quantity provided. *

Yes				
Change in Method of Quantification				
	There has been a change in the method or combination of methods used to track and quantify the substance during the previous calendar year			
Descri	be the changes **			
Select	the reason for change: **			
Descri	be how the change impact tra	acking and quantification of the subs	tance **	
Incid	lents out of the norn	nal course of events		
	There have been incidents out of the normal course of events that occurred at the facility during the previous calendar year that affected the results of tracking/quantification of this substance.			
Explain how tracking and quantifications were affected **				
Sian	ificant Process Cha	nae		
		process change at the facility during	g the previous calendar year.	
On-s	site Releases			
	•	values.In order to calculate totals, y		
Enter the values for releases to air for the substance				
Releases to Air				
Catego	ory	Basis Of Estimate	Quantity (kg)	
Stack	or Point Releases	O - Engineering Estimates	0.086	
Storag	ge or Handling Releases	NA - Not Applicable		
Fugitiv	ve Releases	NA - Not Applicable		
Spills		NA - Not Applicable		

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Distribute Equally

Other Non-point Releases	NA - Not Applicable		
Total - Releases to Air			
0.086			
Enter the values for rele	ases to water hodies		
Releases to Water Bodie			
Category	Basis Of Estimate	Quantity (kg)	
Direct Discharges	NA - Not Applicable		
Spills	NA - Not Applicable		
Leaks	NA - Not Applicable		
Total - Releases to Water Bodies			
Enter the values for rele	ases to land (surface and	underground)	
Releases to Land (the n	ature of "Other" releases	must be specified in the	
Comments)			
Category	Basis Of Estimate	Quantity (kg)	
Spills	NA - Not Applicable		
Leaks	NA - Not Applicable		
Other	NA - Not Applicable		
Total - Releases to Land			
Total Quantity Released			
0.086			

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Jan - Mar %	Apr - Jun %	Jul - Sep %	Oct - Dec %
25	25	25	25
Γotal %			
100			
Reasons for C	Changes in Quantiti	es Released from	Previous Year
	e reason or reasons *		
Changes in product	ion levels		
Comments ? (On-Si	te Releases) **		
()			
Diapoolo			
Disposals	, Cubatanaa Waa D	ionoood	
Reasons Why	Substance Was D	isposed	
Reasons Why	reasons	•	
Reasons Why		•	
Reasons Why Select one or more i Contaminated mate On-site Dispo	reasons rials, Pollution abatement re sal (excluding Tailing	esidues ngs and Waste Ro	•
Reasons Why Select one or more in Contaminated mate On-site Dispo	reasons rials, Pollution abatement re sal (excluding Tailing) your reportable values.In or	esidues ngs and Waste Ro	O CK) I must click the "Validate" bu
Reasons Why Select one or more in Contaminated mate On-site Dispondlick "Edit" to enter On-site Disponder	reasons rials, Pollution abatement re sal (excluding Tailin your reportable values.In or sal	esidues ngs and Waste Roder to calculate totals, you	u must click the "Validate" bu
Reasons Why Select one or more in Contaminated mate On-site Dispo Click "Edit" to enter On-site Dispo Category	reasons rials, Pollution abatement re sal (excluding Tailing) your reportable values. In or sal Basis Of E	esidues ngs and Waste Ro der to calculate totals, you stimate	•
Reasons Why Select one or more in Contaminated mate On-site Dispondlick "Edit" to enter On-site Disponder	reasons rials, Pollution abatement re sal (excluding Tailin your reportable values.In or sal	esidues ngs and Waste Ro der to calculate totals, you stimate	u must click the "Validate" bu
Reasons Why Select one or more in Contaminated mate On-site Dispondick "Edit" to enter in On-site Dispondate Category Landfill	reasons rials, Pollution abatement re sal (excluding Tailing) your reportable values. In or sal Basis Of E	esidues ngs and Waste Ro der to calculate totals, you stimate pplicable	u must click the "Validate" bu
Reasons Why Select one or more in Contaminated mate On-site Dispo Click "Edit" to enter On-site Dispo Category	reasons rials, Pollution abatement re sal (excluding Tailing) your reportable values. In or sal Basis Of E	esidues ngs and Waste Ro der to calculate totals, you stimate pplicable	u must click the "Validate" bu
Reasons Why Select one or more in Contaminated mate On-site Dispondick "Edit" to enter in On-site Dispondate Category Landfill	reasons rials, Pollution abatement re sal (excluding Tailing) your reportable values. In or sal Basis Of E NA - Not A	esidues ngs and Waste Ro der to calculate totals, you stimate pplicable pplicable	u must click the "Validate" bu
Reasons Why Select one or more in Contaminated mate On-site Dispondick "Edit" to enter in On-site Dispondategory Landfill Land Treatment	reasons rials, Pollution abatement re sal (excluding Tailing) your reportable values. In or sal Basis Of E NA - Not A NA - Not A	esidues ngs and Waste Ro der to calculate totals, you stimate pplicable pplicable	u must click the "Validate" bu

Basis Of Estimate

Category

Quantity (kg)

Landfill	NA - Not Applicable		
Land Treatment	NA - Not Applicable		
Underground Injection	NA - Not Applicable		
Storage	NA - Not Applicable		
Total - Off-site Disposals			
Off-site Transfers (exclu	ding Tailings and Waste I	Rock)	
Off-site Transfers for Tre	eatment Prior to Final Disp	oosal	
Category	Basis Of Estimate	Quantity (kg)	
Physical Treatment	NA - Not Applicable		
Chemical Treatment	O - Engineering Estimates	29.535	
Biological Treatment	NA - Not Applicable		
Incineration / Thermal	NA - Not Applicable		
Municipal Sewage Treatment Plant	O - Engineering Estimates	0.622	
Total - Treatment Prior to Final Disposal			
30.157			
Total Quantity Disposed (All Media)			
30.157			

Assign Disposals / Transfers to Off-site Facilities

Choose the Basis of Estimate and enter the quantity transferred off-site for disposal in the first Quantity box. Then enter the quantity transferred to each off-site in its respective quantity field. If you need to add an off-

site facility to the list, click the "+" sign to navigate to the off-site search screen. When you are finished entering all transfer quantities, click "Save and Return".

Assign Disposals / Transfers to Off-site Facilities

Basis of Estimate for Off-sites

Enter breakdown values for

Chemical Treatment

Basis of Estimate

O - Engineering Estimates

Quantity (kg)

29.535

Off-site

Off-Site Name	Quantity (kg)	Address
Detox Environmental Ltd.	29.535	322 Bennett, Bowmanville, ON, Canada

Total Assigned (must equal total reported)

29.535

Assign Disposals / Transfers to Off-site Facilities

Choose the Basis of Estimate and enter the quantity transferred off-site for disposal in the first Quantity box. Then enter the quantity transferred to each off-site in its respective quantity field. If you need to add an off-site facility to the list, click the "+" sign to navigate to the off-site search screen. When you are finished entering all transfer quantities, click "Save and Return".

Assign Disposals / Transfers to Off-site Facilities

Basis of Estimate for Off-sites

Enter breakdown values for

Municipal Sewage Treatment Plant

Basis of Estimate

O - Engineering Estimates

Quantity (kg)

0.622

Off-site

Off-Site Name	Quantity (kg)	Address			
Highland Creek Water Treatment Plant	0.622	1160 Highland Creek W., Toronto, ON, Canada			
Total Assigned (must equal total re	Total Assigned (must equal total reported)				
0.622					
Reasons for Changes in	Quantities Disposed fron	n Previous Year			
Select the applicable reason or reas	sons.				
Changes in production levels, Char (specify in disposals comment field	nges in estimation methods, Pollutior)	prevention activities, Other			
Comments? (Disposals)					
Inconsisteny Lead content used in rags generated and sent out due to	Filter Cake. Higher mg/Kg average of improved IH in dept	compared to last year + more dirty			
Recycling					
Reasons Why Substanc	e Was Recycled				
Select one or more reasons. *					
Off-specification products, Contam	inated materials, Unusable parts or d	iscards			
Off-site Transfers for Re	cycling				
	values.In order to calculate totals, yo	ou must click the "Validate" button.			
Off-site Transfers					
Category	Basis Of Estimate	Quantity (kg)			
Energy Recovery	NA - Not Applicable				
Recovery of Solvents	NA - Not Applicable				
Recovery of Organic Substances (not solvents)	NA - Not Applicable				
Recovery of Metals and Metal Compounds	O - Engineering Estimates	677.073			
Recovery of Inorganic Materials (not metals)	NA - Not Applicable				

Recovery of Acids and Bases	NA - Not Applicable	
Recovery of Catalysts	NA - Not Applicable	
Recovery of Pollution Abatement Residues	NA - Not Applicable	
Refining of Re-use of Used Oil	NA - Not Applicable	
Other	NA - Not Applicable	
Total Quantity Recycled		
677.073		
• •	-site Facilities	•
Enter breakdown values for		
Recovery of Metals and Metal Cor	npounds	
Basis of Estimate		
O - Engineering Estimates		
Quantity (kg)		
677.073		
Off-site		
Off-Site Name	Quantity (kg)	Address
Combined Metal Industries Inc.	677.073	505 B Garyray Dr., Weston, ON, Canada

Total Assigned (must equal total reported)

677.073

Reasons for Changes in Quantities Recycled from Previous Year

Select the applicable reason or reasons *

No significant change (i.e. < 10%) or no change

Comments? (Recycling)

Comparison Report: Enters, Creation, Contained in Product

Ensure that "Last Reported Quantity" and the "Reporting Period of the last reported quantity" reflect current year's reporting to the last year's values. If you selected the pre-population function, the exact values in your previous year's report will be inserted into the current year's template, including the comparison report. Therefore, you will be required to update all values and texts.

Enters the facility (Use)

Quantity (kg)	Last Reported Quantity (kg) *	Reporting Period of Last Reported Quantity *	Change	% Change
853.846	1088.235	2013	-234.389	-21.54

Creation

Creation

Quantity (kg)	Last Reported Quantity (kg) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	

Contained in Product

Contained in Product

Quantity (kg)	Last Reported Quantity (kg) *	Reporting Period of Last Reported Quantity *	Change	% Change	
146.529	329.071	2013	-182.542	-55.47	

Reasons for Change

Reasons for Change

	uction levels			
(please specify)				
Comparison	Report: On-site	Releases		
•	·		of the last report	ed quantity" reflect curren
	•	•	•	on, the exact values in you
•	•	o the current year's tem	plate, including t	he comparison report.
	Il be required to update	all values and texts.		
Total Releas	ses to Air			
Total Releas	ses to Air			
Quantity (kg)	Last Reported Quantity (kg) *	Reporting Period of Last Reported Quantity *	Change	% Change
0.086	0.109	2013	-0.023	-21.10
	ses to Water ses to Water			
Total Releas		Reporting Period of Last Reported Quantity *	Change	% Change
Total Releas Quantity (kg)	Ses to Water Last Reported	of Last Reported	Change 0	% Change
Total Releas Quantity (kg)	Ses to Water Last Reported Quantity (kg) *	of Last Reported Quantity *		% Change
Total Releas Quantity (kg) 0	Last Reported Quantity (kg) *	of Last Reported Quantity *		% Change
Total Releas Quantity (kg) 0 Total Releas	Last Reported Quantity (kg) *	of Last Reported Quantity *		% Change
Total Releas Quantity (kg) 0 Total Releas Total Releas	Last Reported Quantity (kg) *	of Last Reported Quantity *		% Change
Total Releas Quantity (kg)	Last Reported Quantity (kg) * 0 Ses to Land Last Reported	of Last Reported Quantity * 2013 Reporting Period of Last Reported	0	
Total Releas Quantity (kg) Total Releas Total Releas Quantity (kg)	Last Reported Quantity (kg) * 0 Ses to Land Ses to Land Last Reported Quantity (kg) *	of Last Reported Quantity * 2013 Reporting Period of Last Reported Quantity *	0 Change	
Total Releas Quantity (kg) Total Releas Total Releas Quantity (kg)	Last Reported Quantity (kg) * 0 Ses to Land Last Reported Quantity (kg) *	of Last Reported Quantity * 2013 Reporting Period of Last Reported Quantity *	0 Change	
Total Releas Quantity (kg) Total Releas Total Releas Quantity (kg)	Last Reported Quantity (kg) * 0 Ses to Land Ses to Land Last Reported Quantity (kg) *	of Last Reported Quantity * 2013 Reporting Period of Last Reported Quantity *	0 Change	

(please specify)

Conservative mass balance approach based on 1 % emission rate before scrubbing.

(please specify): Conservative mass balance approach based on 1 % emission rate before scrubbing.

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

Ensure that "Last Reported Quantity" and the "Reporting Period of the last reported quantity" reflect current year's reporting to the last year's values. If you selected the pre-population function, the exact values in your previous year's report will be inserted into the current year's template, including the comparison report. Therefore, you will be required to update all values and texts.

Therefore, you will b	e required to update a	ll values and texts.		
Total On-site	Disposals			
Total On-site	Disposals			
Quantity (kg)	Last Reported Quantity (kg) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Total Off-site	Disposals			
Total Off-site	Disposals			
Quantity (kg)	Last Reported Quantity (kg) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
	transfer for trea			
Total Off-site	transfer for trea	tment Prior to F	-inal Disposal	
Quantity (kg)	Last Reported Quantity (kg) *	Reporting Period of Last Reported Quantity *	Change	% Change
30.157	10.870	2013	19.287	177.43
Total On-site	Disposal of Tail	ings and Waste	e Rock	
Total On-site	Disposal of Tail	ings and Waste	Rock	
Quantity (kg)	Last Reported Quantity (kg) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	

Total Off-site Disposal of Tailings and Waste Rock Total Off-site Disposal of Tailings and Waste Rock Quantity (kg) Last Reported Reporting Period Change % Change Quantity (kg) * of Last Reported Quantity * 0 0 0 2013 Reasons for Change Reasons for Change Reason(s) for Change Decrease in production levels, Implementation of actions outside of toxics reduction plan, Other (please specify) Inconsistent Lead content used in Filter Cake. Higher mg/kg average than last year. Increaed IH cleaning in the Dept (please specify): Inconsistent Lead content used in Filter Cake. Higher mg/kg average than last year. Increaed IH cleaning in the Dept Comparison Report: Transfers off-site for Recycling Ensure that "Last Reported Quantity" and the "Reporting Period of the last reported quantity" reflect current year's reporting to the last year's values. If you selected the pre-population function, the exact values in your previous year's report will be inserted into the current year's template, including the comparison report. Therefore, you will be required to update all values and texts. Total off-site Transfers for Recycling Total off-site Transfers for Recycling Quantity (kg) Last Reported Reporting Period % Change Change Quantity (kg) ' of Last Reported Quantity * 677.073 748.185 2013 -71.112 -9.50 Reasons for Change Reasons for Change Reason(s) for Change No reasons - quantities approximately the same, Decrease in production levels, Other (please specify)

Less panels processed through HASL Dept. Expect this to continue yr after yr.

(please specify): Less panels processed through HASL Dept. Expect this to continue yr after yr.
NA - 16, Ammonia (total)
NA - 16, Ammonia (total)
Substance Reporting Status
Applicable Programs
NPRI - Does this substance meet the criteria specified in the Canada Gazette notice? Selecting "No" indicates voluntary reporting of this substance to the NPRI. *
Yes
ON MOE TRA - Does this substance meet the criteria specified in the Ontario Regulation 455/09 under the TRA? Selecting "No" indicates voluntary reporting of this substance to the ON MOE. *
Yes
Is this considered the first report for this substance to the ON MOE TRA? (Please select "Help" for further clarification) *
No
Would you like to create an exit record for this ON MOE TRA substance? *
No
Comments
General Information about the Substance
Releases and Transfers of the Substance
Releases and Transfers of the Substance
Was the substance released on-site? *
Yes
If the substance was released on-site and the total quantity released was less than one tonne, select the check-box below
☐ The substance will be reported as the sum of releases to all media (total of 1 tonne or less).
Disposals and Off-site Transfers for Recycling
Was the substance disposed of (on-site or off-site), or transferred for treatment prior to final disposal? *
Yes

Is the facility required to report on disposals of tailings and waste rock for the selected reporting period? *

No
Was the substance transferred off-site for recycling? *
Yes
Nature of Activities *
Indicate whether the substance was manufactured, processed, or otherwise used, by selecting the nature of such activities.
Manufacture the Substance
Process the Substance
As a reactant
Otherwise Use of the Substance
As a physical or chemical processing aid
TRA Quantifications
Enters the facility (Use), Creation, Contained in Product for ON MOE TRA
Enters the facility (Use)
The amount of substance that enters a process as the substance itself or part of another substance, rolled up at the facility level.
Quantity (Tonnes) **
40.74
Do you want to use ranges for public reporting? If "No" is selected you are indicating that any report to the public may contain the exact quantity provided. *
Yes
Creation
The amount of substance that is created
Quantity (Tonnes) **
0

Do you want to use ranges for public reporting? If "No" is selected you are indicating that any report to the public may contain the exact quantity provided. *

Yes		
Contained in Product		
The amount of substance contained	ed in product	
Quantity (Tonnes) **		
0		
Do you want to use ranges for public may contain the exact quan		eted you are indicating that any report to the
Yes		
Change in Method of Q	uantification	
•	n the method or combination	of methods used to track and quantify the
Describe the changes **		
Select the reason for change: **		
Describe how the change impact t	racking and quantification of	the substance **
Incidents out of the non	mal course of event	S
		events that occurred at the facility during the ng/quantification of this substance.
Explain how tracking and quantific	ations were affected **	
Significant Process Cha	ange	
		lity during the previous calendar year.
On-site Releases		
	e values.In order to calculate	e totals, you must click the "Validate" button.
Enter the values for rele	eases to air for the s	substance
Releases to Air		
Category	Basis Of Estimate	Quantity (Tonnes)

Stack or Point Releases	O - Engineering Estimates	16.79
Storage or Handling Releases	NA - Not Applicable	
Fugitive Releases	NA - Not Applicable	
Spills	NA - Not Applicable	
Other Non-point Releases	NA - Not Applicable	
Total - Releases to Air		
16.79		
Enter the values for rele	eases to water bodies	
Releases to Water Bodi	es	
Category	Basis Of Estimate	Quantity (Tonnes)
Direct Discharges	NA - Not Applicable	
Spills	NA - Not Applicable	
Leaks	NA - Not Applicable	
Total - Releases to Water Bodies		
Enter the values for rele	eases to land (surface and	d underground)
	nature of "Other" releases	,
Comments)		
Category	Basis Of Estimate	Quantity (Tonnes)
Spills	NA - Not Applicable	
Leaks	NA - Not Applicable	
Other	NA - Not Applicable	

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Total - Releases to L	and		
Total Quantity Relea	sed		
16.79			
10.79			
Breakdown of	Annual Releases		
☐ Distribute Equ	ually		
Quarterly Brea	akdown *		
Jan - Mar %	Apr - Jun %	Jul - Sep %	Oct - Dec %
25	25	25	25
Total %			
100			
December 6	Shangaa in Oyantit	ica Dalacad fram	Drovious Voor
	Changes in Quantit	ies Released Ifori	1 Previous Year
Select the applicable	e reason or reasons *		
No significant change	ge (i.e. < 10%) or no chang	е	
Comments ? (On-Sit	te Releases) **		
Disposals			
•	Substance Was D	Disposed	
Select one or more r		•	
Contaminated mate	rials		
	.,		
	sal (excluding Taili	_	,
_	•	rder to calculate totals, yo	u must click the "Validate" button.
On-site Dispos	sal		
Category	Basis Of E	Estimate	Quantity (Tonnes)
Landfill	NA - Not A	Applicable	
Land Treatment	NA - Not A	Applicable	

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Underground Injection	NA - Not Applicable	
Total - On-site Disposals		
Off-site Disposal (exclu	uding Tailings and Waste	e Rock)
Off-site Disposal		
Category	Basis Of Estimate	Quantity (Tonnes)
Landfill	NA - Not Applicable	
Land Treatment	NA - Not Applicable	
Underground Injection	NA - Not Applicable	
Storage	NA - Not Applicable	
Total - Off-site Disposals		
Off-site Transfers (exc	luding Tailings and Wast	te Rock)
	reatment Prior to Final D	,
Category	Basis Of Estimate	Quantity (Tonnes)
Physical Treatment	NA - Not Applicable	
Chemical Treatment	O - Engineering Estimates	0.389
Biological Treatment	NA - Not Applicable	
Incineration / Thermal	NA - Not Applicable	
Municipal Sewage Treatment Plant	O - Engineering Estimates	0.117

Total - Treatment Prior to Final Disposal

0.506

Total Quantity Disposed (All Media)

0.506

Assign Disposals / Transfers to Off-site Facilities

Choose the Basis of Estimate and enter the quantity transferred off-site for disposal in the first Quantity box. Then enter the quantity transferred to each off-site in its respective quantity field. If you need to add an off-site facility to the list, click the "+" sign to navigate to the off-site search screen. When you are finished entering all transfer quantities, click "Save and Return".

Assign Disposals / Transfers to Off-site Facilities

Basis of Estimate for Off-sites

Enter breakdown values for

Chemical Treatment

Basis of Estimate

O - Engineering Estimates

Quantity (Tonnes)

0.389

Off-site

Off-Site Name	Quantity (Tonnes)	Address
Detox Environmental Ltd.	0.389	322 Bennett, Bowmanville, ON, Canada

Total Assigned (must equal total reported)

0.389

Assign Disposals / Transfers to Off-site Facilities

Choose the Basis of Estimate and enter the quantity transferred off-site for disposal in the first Quantity box. Then enter the quantity transferred to each off-site in its respective quantity field. If you need to add an off-site facility to the list, click the "+" sign to navigate to the off-site search screen. When you are finished entering all transfer quantities, click "Save and Return".

Assign Disposals / Transfers to Off-site Facilities

Basis of Estimate for Off-sites

Enter breakdown values for

Municipal Sewage Treatment Plan	t	
Basis of Estimate		
O - Engineering Estimates		
Quantity (Tonnes)		
0.117		
Off cito		
Off-site	O(!tv./T)	Address
Off-Site Name	Quantity (Tonnes)	Address
Highland Creek Water Treatment Plant	0.117	1160 Highland Creek W., Toronto, ON, Canada
Total Assigned (must equal total re	eported)	
0.117		
Reasons for Changes in	Quantities Disposed from	m Previous Year
Select the applicable reason or rea	•	TITTOVIOGO TOGI
		.n
Changes in production levels, Other	er (specify in disposals comment field	a)
Comments? (Disposals)		
more enig solution disposed off in	2014	
Recycling		
Reasons Why Substance	e Was Recycled	
Select one or more reasons. *	•	
Contaminated materials		
	ecycling e values.In order to calculate totals, y	ou must click the "Validate" button.
Off-site Transfers		
Category	Basis Of Estimate	Quantity (Tonnes)
Energy Recovery	NA - Not Applicable	
Recovery of Solvents	NA - Not Applicable	

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Recovery of Organic Substances (not solvents)	NA - Not Applicable	
Recovery of Metals and Metal Compounds	NA - Not Applicable	
Recovery of Inorganic Materials (not metals)	O - Engineering Estimates	23.360
Recovery of Acids and Bases	NA - Not Applicable	
Recovery of Catalysts	NA - Not Applicable	
Recovery of Pollution Abatement Residues	NA - Not Applicable	
Refining of Re-use of Used Oil	NA - Not Applicable	
Other	NA - Not Applicable	
Total Quantity Recycled		
23.360		
Choose the Basis of Estimate and of Then enter the quantity transferred		tity field. If you need to add an off-
Basis of Estimate for Off	f-sites	
Enter breakdown values for		
Recovery of Inorganic Materials (no	ot metals)	
Basis of Estimate		

Quantity (Tonnes)

O - Engineering Estimates

23.360

Off-site

Off-Site Name	Quantity (Tonnes)	Address
Micronutrients	23.360	1550 Research Way, Indianapolis, IN, United States

Total Assigned (must equal total reported)

23.360

Reasons for Changes in Quantities Recycled from Previous Year

Select the applicable reason or reasons *

Other (specify in recycling comments field)

Comments? (Recycling)

Average g/l of copper in alkaline etchant is lower which suggest that spent etchant was more diluted with fresh etchant.

Comparison Report: Enters, Creation, Contained in Product

Ensure that "Last Reported Quantity" and the "Reporting Period of the last reported quantity" reflect current year's reporting to the last year's values. If you selected the pre-population function, the exact values in your previous year's report will be inserted into the current year's template, including the comparison report. Therefore, you will be required to update all values and texts.

Enters the facility (Use)

Enters the facility (Use)

Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
40.74	39.408	2013	1.332	3.38

Creation

Creation

Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	

Contained in I	Product			
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Reasons for C	Change			
Reasons for C	_			
Reason(s) for Chan	· ·			
No reasons - quanti	ties approximately th	ne same, Increase in pro	oduction levels	
(please specify)				
Ensure that "Last Revear's reporting to the previous year's reporting to the previous year's report the refore, you will be	ne last year's values. ort will be inserted into the required to update	e Releases d the "Reporting Period If you selected the pre- to the current year's tem e all values and texts.	population function	on, the exact values in
Ensure that "Last Re year's reporting to the previous year's reporting to the Therefore, you will be Total Release Total Release	eported Quantity" and le last year's values. Our will be inserted into the required to update as to Air	d the "Reporting Period If you selected the pre- to the current year's tem e all values and texts.	population function f	on, the exact values in
Ensure that "Last Re year's reporting to the previous year's report Therefore, you will be Total Release	eported Quantity" and le last year's values. Our will be inserted into the required to update as to Air	d the "Reporting Period If you selected the pre- to the current year's tem	population function	on, the exact values in
Ensure that "Last Re year's reporting to the previous year's reporting to the Therefore, you will be Total Release Total Release	eported Quantity" and le last year's values. For will be inserted into the required to update as to Air Last Reported Quantity	d the "Reporting Period If you selected the pre- to the current year's tem e all values and texts. Reporting Period of Last Reported	population function f	on, the exact values in the comparison report
Ensure that "Last Re year's reporting to the previous year's reporting to the Therefore, you will be Total Release Total Release Quantity (Tonnes)	eported Quantity" and le last year's values. For will be inserted into the required to update as to Air Last Reported Quantity (Tonnes) *	d the "Reporting Period If you selected the pre- to the current year's tem e all values and texts. Reporting Period of Last Reported Quantity *	change	on, the exact values in the comparison report
Ensure that "Last Re year's reporting to the previous year's reporting to the Therefore, you will be Total Release Total Release Quantity (Tonnes)	eported Quantity" and le last year's values. For will be inserted into the required to update as to Air Last Reported Quantity (Tonnes) * 17.242	d the "Reporting Period If you selected the pre- to the current year's tem e all values and texts. Reporting Period of Last Reported Quantity *	change	on, the exact values in the comparison report
Ensure that "Last Revear's reporting to the previous year's reporting to the previous year's reporting to the previous year's reporting to tall Release Total Release Quantity (Tonnes) 16.79 Total Release Total Release	eported Quantity" and le last year's values. For will be inserted into the required to update as to Air Last Reported Quantity (Tonnes) * 17.242	d the "Reporting Period If you selected the pre- to the current year's tem e all values and texts. Reporting Period of Last Reported Quantity *	change	on, the exact values in the comparison report

Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Reasons for C	Change			
Reasons for C	hange			
Reason(s) for Chang	ge			
No reasons - quanti	ties approximately the	same		
(please specify)				
year's reporting to the previous year's repo	e last year's values.If rt will be inserted into e required to update a	you selected the pre-p the current year's tem	oopulation function,	quantity" reflect current the exact values in your comparison report.
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Total Off-site I	Disposals			
Total Off-site I	•			
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
	ransfer for trea		•	
Total Off-site t	ransfer for trea	tment Prior to F	Final Disposa	<u> </u>
Quantity (Tonnes)	Last Reported	Reporting Period	Change	% Change

0.506	0.388	2013	0.118	30.41
Total On-site I	Disposal of Tail	ings and Waste	Rock	
_	•	ings and Waste		
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Total Off-site I	Disposal of Tail	ings and Waste	Rock	
	•	ings and Waste		
Quantity (Tonnes)	Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
0	0	2013	0	
Reasons for C Reason(s) for Chang Increase in production (please specify) more enig solution v	ge on levels, Other			
(please specify): mo	ore enig solution was o	disposed		
Ensure that "Last Re year's reporting to th previous year's repo Therefore, you will b	eported Quantity" and the last year's values.If the inserted into the required to update a	you selected the pre-p the current year's temp Ill values and texts.	of the last reported opulation function	d quantity" reflect current , the exact values in you e comparison report.
	ransfers for Re	•		
I Otal Off-Site I Quantity (Tonnes)	ransfers for Re Last Reported Quantity (Tonnes) *	Reporting Period of Last Reported Quantity *	Change	% Change
23.360	21.780	2013	1.580	7.25

Reasons for	r Change	9	
Reasons for	r Change	9	
Reason(s) for Ch	ange		
No reasons - qua	antities appr	oximately the s	same, Increase in production levels
(please specify)			
Post Plan S	ubstanc	e Details	
50-00-0, Fo	ormaldel	nyde	
50-00-0, Formalo	dehyde		
changes to the in about updating th	s read-only formation o	and is pulled d n this screen, p	lirectly from your most recent submitted Plan Summary. To make blease update your plan summary and re-submit. For more details
Objectives			
Objectives in plar			
DDi intends to co	onduct furthe	er research to i	dentify new reduction options
Use Targets	5		
What is the facility? *	targeted	I reduction	in use of the toxic substance at the
No quantity target		Quantity	Unit
X	or		
What is the	targeted	l timefram	e for this reduction? *
No timeline targ	et		years
\boxtimes		or	
Description of Ta	rget		

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Creation Ta	argets				
	targeted	l reduction in	n creation of the	e toxic subs	stance at the
facility? * No quantity target		Quantity		Unit	
\boxtimes	or				
What is the	targeted	timeframe	for this reductio	n? *	
No timeline targ	get		years		
\boxtimes		or			
Description of ta	rgets				
Actions					
Additional A	Actions				
Were there any and/or creation of			plan taken during the r	eporting period	to reduce the use
No					
Describe any ad objectives: **	ditional actic	ns that were take	n during the reporting	period to achiev	ve the plan's
Provide a public	summary of	the description o	f the additional action t	aken: **	
Reductions	due to a	dditional ac	tions taken **		
The amount of rethat resulted due			ng> of the substance a	at the facility dur	ing the reporting period
☐ No Amount				to	nnes
		strong>creation< e additional actio	/strong> of the substar ns.	nce at the facility	/ during the reporting
☐ No Amount				toı	nnes

The amount of reduction in the substance correporting period that resulted due to the additional acti		at the facility during the
☐ No Amount		tonnes
The amount of reduction in release to air<td></td><td>ne facility during the</td>		ne facility during the
☐ No Amount		tonnes
The amount of reduction in release to water reporting period that resulted due to the additional action		at the facility during the
☐ No Amount		tonnes
The amount of reduction in release to land<td>trong> of the substance at</td><td>the facility during the</td>	trong> of the substance at	the facility during the
☐ No Amount		tonnes
The amount of reduction in the substance dis rocks) at the facility during the reporting period that res		
☐ No Amount		tonnes
The amount of reduction in the substance dis rocks) at the facility during the reporting period that res		
☐ No Amount		tonnes
The amount of reduction in the substance recreporting period that resulted due to the additional acti		the facility during the
☐ No Amount		tonnes
Amendments		
Amendments		
Were any amendments made to the toxic substance re	eduction plan during the re	porting period? *
No		
Description any amendments that were made to the to period **	xic substance reduction pl	an during the reporting

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Provide a public reduction plan du			of any amendments tha	at were made to the toxic substance
7647-01-0,	_			
7647-01-0, Hydi	ochione acid	ı		
	is read-only formation o	and is pulled dir n this screen, ple	ectly from your most re ease update your plan	cent submitted Plan Summary. To make summary and re-submit. For more details
Objectives				
Objectives in plan	า: *			
DDi intends to re	duce HCL b	out additional res	earch and testing is red	quired prior to the commitment.
Use Targets	3			
What is the	targeted	I reduction	in use of the tox	ic substance at the
facility? *				
No quantity target		Quantity		Unit
\boxtimes	or			
What is the	targeted	l timeframe	for this reduction	on? *
No timeline targ	•		years	
\boxtimes		or		
Description of Ta	rget			
Creation Ta	rgets			
What is the	targeted	I reduction	in creation of the	e toxic substance at the
facility? *				
No quantity target		Quantity		Unit
\boxtimes	or			

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What is the targe	ted timefram	e for this reduc	tion? *	
No timeline target		years		
\boxtimes	or			
Description of targets				
Actions				
Additional Action	S			
Were there any additional and/or creation of the su		he plan taken during th	ne reporting period to reduce the u	use
No				
Describe any additional objectives: **	actions that were to	aken during the reporti	ng period to achieve the plan's	
Provide a public summa	ry of the description	n of the additional action	on taken: **	
Reductions due t	o additional	actions taken **		
The amount of reduction that resulted due to the a		strong> of the substanc	ce at the facility during the reportir	ng period
☐ No Amount			tonnes	
The amount of reduction period that resulted due			stance at the facility during the rep	oorting
☐ No Amount			tonnes	
The amount of reduction reporting period that resu			roduct at the facility duri	ing the
☐ No Amount			tonnes	
The amount of reduction reporting period that resi	in releasulted due to the ad	e to air of the ditional actions.	substance at the facility during th	1e
□ No Amount			tonnes	

The amount of reduction in release to water reporting period that resulted due to the additional action		at the facility during the
☐ No Amount		tonnes
The amount of reduction in release to land<td></td><td>the facility during the</td>		the facility during the
☐ No Amount		tonnes
The amount of reduction in the substance dis rocks) at the facility during the reporting period that res	posed on-site (insulted due to the additional	cluding tailings and waste actions.
☐ No Amount		tonnes
The amount of reduction in the substance dis rocks) at the facility during the reporting period that res		
☐ No Amount		tonnes
The amount of reduction in the substance recreporting period that resulted due to the additional acti		the facility during the
☐ No Amount		tonnes
Amendments		
Amendments		
Were any amendments made to the toxic substance re	eduction plan during the re	porting period? *
No		
No Description any amendments that were made to the to period **	xic substance reduction pl	an during the reporting
Description any amendments that were made to the to	·	
Description any amendments that were made to the to period ** Provide a public summary of the description of any am	·	

		D '	(1 F	T 1 -
()n	iectives,	Descri	ntion	and	Lardets
\sim				aiia	1 41 4010

This information is read-only and is pulled directly from your most recent submitted Plan Summary. To make changes to the information on this screen, please update your plan summary and re-submit. For more details about updating the plan summary, please select "Help".

about apaating the	Piari Jarrii	ilary, piodoc ocic	, or 1101p .	
Objectives				
Objectives in plan:	*			
DDi intends to red	uce H2SO	4 but additional r	esearch and testing is ı	required prior to the commitment
Use Targets				
•	argeted	reduction i	n use of the toxi	c substance at the
No quantity target		Quantity		Unit
X	or			
What is the ta	argeted	timeframe	for this reduction	n? *
No timeline target			years	
X		or		
Description of Targ	et			
Creation Tar	gets			
What is the ta	argeted	reduction i	n creation of the	toxic substance at the
No quantity target		Quantity		Unit
X	or			
What is the ta	argeted	timeframe	for this reduction	n? *
No timeline target	:		years	
X		or		

Description of targets

Actions	
Additional Actions	
Were there any additional actions outside the plan ta and/or creation of the substance? *	ken during the reporting period to reduce the use
No	
Describe any additional actions that were taken durir objectives: **	ng the reporting period to achieve the plan's
Provide a public summary of the description of the ac	dditional action taken: **
Reductions due to additional actions	s taken **
The amount of reduction in use of that resulted due to the additional actions.	the substance at the facility during the reporting period
☐ No Amount	tonnes
The amount of reduction in creation <td>> of the substance at the facility during the reporting</td>	> of the substance at the facility during the reporting
☐ No Amount	tonnes
The amount of reduction in the substance cereporting period that resulted due to the additional acceptance.	
☐ No Amount	tonnes
The amount of reduction in release to air<td></td>	
☐ No Amount	tonnes
The amount of reduction in release to water reporting period that resulted due to the additional ac	
☐ No Amount	tonnes

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	tonnes
The amount of reduction in the substance dis rocks) at the facility during the reporting period that re-	
☐ No Amount	tonnes
The amount of reduction in the substance dis rocks) at the facility during the reporting period that re-	posed off-site (including tailings and waste sulted due to the additional actions.
☐ No Amount	tonnes
The amount of reduction in the substance red reporting period that resulted due to the additional actions.	cycled off-site at the facility during the ons.
☐ No Amount	tonnes
Amendments	
Amendments	
Were any amendments made to the toxic substance re-	eduction plan during the reporting period? *
No	
Description any amendments that were made to the to period **	exic substance reduction plan during the reporting
Provide a public summary of the description of any am reduction plan during the reporting period **	nendments that were made to the toxic substance
7697-37-2, Nitric acid	
7697-37-2, Nitric acid	
Objectives, Description and Targets	
•	n your most recent submitted Plan Summary. To make
changes to the information on this screen, please upd about updating the plan summary, please select "Help	ate your plan summary and re-submit. For more details ".
Objectives	
Objectives in plan: *	

Viasystems intends to r commitment	educe HNO3 but a	dditional research and testing is required prior to any
Use Targets		
What is the targe	eted reduction	n in use of the toxic substance at the
facility? *		
No quantity target	Quantity	Unit
⊠ or		
What is the targe	eted timefram	e for this reduction? *
No timeline target		years
\boxtimes	or	
Description of Target		
Creation Targets	3	
What is the targe	eted reduction	n in creation of the toxic substance at the
facility? *		
No quantity target	Quantity	Unit
⊠ or		
What is the targe	eted timefram	e for this reduction? *
No timeline target		years
\boxtimes	or	
Description of targets		
Options		
Toxic Reduction	Options Impl	emented
Equipment or pro	ocess modific	ations

Changed to aqueous cleaners	
Activity	
Changed to aqueous cleaners	
Describe the steps that were taken in the reporting per	riod to implement the toxic reduction option: *
Cataogy 3: Elimiante 15A cleaner. Continued to work	with Nitric acid free cleaners on plating lines.
Provide a public summary of the description of the ste	ps: *
Continued to work with Nitric acid free cleaners on pla	ating lines.
Provide a comparison of the steps that were described taken during the reporting period: *	d in the plan for implementation with the actual steps
Work still required for IS preclean line	
Provide a public summary of the comparison of the ste	eps: *
additional work required on outer layer panel preclean	ning chemicals
Reductions due to Options Implemen	ted
The amount of reduction in use of the that resulted due to the steps described:	ne substance at the facility during the reporting period
No Amount	tonnes
The amount of reduction in creation period that resulted due to the steps described:	of the substance at the facility during the reporting
No Amount	tonnes
The amount of reduction in the substance correporting period that resulted due to the steps describe	
No Amount	tonnes
The amount of reduction in release to air<td></td>	
No Amount	tonnes

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	1	tonnes
The amount of reduction in release to land<td>strong> of the substance at t</td><td>he facility during the</td>	strong> of the substance at t	he facility during the
No Amount	1	tonnes
The amount of reduction in the substance dis rocks) at the facility during the reporting period that res	posed on-site (incl sulted due to the steps desc	uding tailings and waste ribed:
No Amount	1	tonnes
The amount of reduction in the substance dis rocks) at the facility during the reporting period that res	posed off-site (incl sulted due to the steps desc	uding tailings and waste ribed:
No Amount	1	tonnes
The amount of reduction in the substance red reporting period that resulted due to the steps describe		ne facility during the
No Amount	1	tonnes
Will the timelines in the current version of the plan will	be met. *	
Yes		
Comments		
On-site reuse, recycling or recovery		
Instituted recirculation within a proces	SS	
Activity		
Instituted recirculation within a process		
Describe the steps that were taken in the reporting pe	riod to implement the toxic re	eduction option: *
Catagory V: Install Diffusion Dialysis unit to recover N	itric acid	
Provide a public summary of the description of the ste	ps: *	
Install Diffusion Dialysis unit to recover Nitric acid		

Provide a comparison of the steps that were described in the plan for implementation with the actual steps taken during the reporting period: *

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Project is behind. No Capex established		
Provide a public summary of the comparison of the ste	eps: *	
Progress is behind schedule. Pilot Testing has not sta	rted in 2015	
Reductions due to Options Implemen	ted	
The amount of reduction in use of the that resulted due to the steps described:	ne substance at the facility	during the reporting period
No Amount		tonnes
The amount of reduction in creation period that resulted due to the steps described:	of the substance at the fac	cility during the reporting
No Amount		tonnes
The amount of reduction in the substance correporting period that resulted due to the steps describe		> at the facility during the
No Amount		tonnes
The amount of reduction in release to air<td>ong> of the substance at tled:</td><td>he facility during the</td>	ong> of the substance at tled:	he facility during the
No Amount		tonnes
The amount of reduction in release to water<re>reporting period that resulted due to the steps described</re>		at the facility during the
		tonnes
The amount of reduction in release to land<td>strong> of the substance at</td><td>t the facility during the</td>	strong> of the substance at	t the facility during the
No Amount		tonnes
The amount of reduction in the substance dis rocks) at the facility during the reporting period that res		
No Amount		tonnes

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	tonnes
The amount of reduction in the substance recreporting period that resulted due to the steps describ	cycled off-site at the facility during the ed:
No Amount	tonnes
Will the timelines in the current version of the plan will	be met. *
Yes	
Comments	
2018 timeline is at risk. Company acquired in 2015. N	lew Management to be informed.
Improved inventory management or p	ourchasing techniques
Initiated testing of outdated material	
Activity	
Initiated testing of outdated material	
Describe the steps that were taken in the reporting pe	riod to implement the toxic reduction option: *
Describe the steps that were taken in the reporting per Catagory 6: Using lab data to extend nitric acid tank s	·
	stripping solution in enig and pal lines
Catagory 6: Using lab data to extend nitric acid tank s	stripping solution in enig and pal lines
Catagory 6: Using lab data to extend nitric acid tank some service a public summary of the description of the steep	ps: *
Catagory 6: Using lab data to extend nitric acid tank s Provide a public summary of the description of the ste Using lab data to extend nitric acid tank stripping Provide a comparison of the steps that were described	ctripping solution in enig and pal lines sps: * d in the plan for implementation with the actual steps
Catagory 6: Using lab data to extend nitric acid tank some Provide a public summary of the description of the stern Using lab data to extend nitric acid tank stripping Provide a comparison of the steps that were described taken during the reporting period: *	ctripping solution in enig and pal lines ps: * d in the plan for implementation with the actual steps assessment required.
Catagory 6: Using lab data to extend nitric acid tank sometimes. Provide a public summary of the description of the stern Using lab data to extend nitric acid tank stripping. Provide a comparison of the steps that were described taken during the reporting period: * Stripping quality has impacted reduction effort. More starting to the steps that were described taken during the reporting period: *	ctripping solution in enig and pal lines ps: * d in the plan for implementation with the actual steps assessment required.
Catagory 6: Using lab data to extend nitric acid tank sometimes. Provide a public summary of the description of the steel Using lab data to extend nitric acid tank stripping. Provide a comparison of the steps that were described taken during the reporting period: * Stripping quality has impacted reduction effort. More approvide a public summary of the comparison of the steel Provide a public summary of the comparison of the steel Provide and Provide approvide	ctripping solution in enig and pal lines ps: * d in the plan for implementation with the actual steps assessment required. eps: *
Catagory 6: Using lab data to extend nitric acid tank sometimes. Provide a public summary of the description of the steel Using lab data to extend nitric acid tank stripping. Provide a comparison of the steps that were described taken during the reporting period: * Stripping quality has impacted reduction effort. More a stripping quality has impacted reduction of the steel Stripping quality has impacted reduction effort. Reductions due to Options Implementation.	ctripping solution in enig and pal lines ps: * d in the plan for implementation with the actual steps assessment required. eps: *

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	tonnes		
The amount of reduction in the substance correporting period that resulted due to the steps describe	ntained in product at the facility ed:	during the	
No Amount	tonnes		
The amount of reduction in release to air reporting period that resulted due to the steps described		g the	
No Amount	tonnes		
The amount of reduction in release to water reporting period that resulted due to the steps described	strong> of the substance at the facility doed:	uring the	
No Amount	tonnes		
The amount of reduction in release to land<td>trong> of the substance at the facility du</td><td>ring the</td>	trong> of the substance at the facility du	ring the	
No Amount	tonnes		
The amount of reduction in the substance dis rocks) at the facility during the reporting period that res		and waste	
No Amount	tonnes		
The amount of reduction in the substance dis rocks) at the facility during the reporting period that res	cosed off-site (including tailings tailings described:	and waste	
No Amount	tonnes		
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	tonnes		
Will the timelines in the current version of the plan will be met. *			
No			
Comments			
Extending Ni Rack stripper life has been problematic. Additional time/work required to ensure quality as we have revirted back to more frequent D&R.			

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Good operator practice or training				
Other				
Activity				
Other				
Describe the steps that were taken in the reporting period to implement the toxic reduction option: *				
Catagory 7: Vary Sn Plating thickness per product design to reduce scrap and sn stripper consumption				
Provide a public summary of the description of the step	ps: *			
Vary Sn Plating thickness per product design to reduce scrap and sn stripper consumption				
Provide a comparison of the steps that were described in the plan for implementation with the actual steps taken during the reporting period: *				
LPA and plating continual improvement projects occur	rred. Need to add TRA tas	ks into CI projects		
Provide a public summary of the comparison of the ste	eps: *			
LPA and plating continual improvement projects occur	rred and are ongoing			
Reductions due to Options Implemented				
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		tonnes		
The amount of reduction in creation period that resulted due to the steps described:	of the substance at the fa	cility during the reporting		
No Amount		tonnes		
The amount of reduction in the substance correporting period that resulted due to the steps describe		> at the facility during the		
No Amount		tonnes		
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		tonnes		

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	to	onnes		
The amount of reduction in release to land<td>trong> of the substance at th</td><td>ne facility during the</td>	trong> of the substance at th	ne facility during the		
No Amount	to	onnes		
The amount of reduction in the substance disrocks) at the facility during the reporting period that res	posed on-site (inclu sulted due to the steps descri	uding tailings and waste ibed:		
No Amount	to	onnes		
The amount of reduction in the substance dis rocks) at the facility during the reporting period that res	posed off-site (inclusulted due to the steps descri	uding tailings and waste ibed:		
No Amount	to	onnes		
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	to	onnes		
Will the timelines in the current version of the plan will be met. *				
Yes				
Comments				
expecting improved sn stripper utilization				
Actions				
Additional Actions				
Were there any additional actions outside the plan taken during the reporting period to reduce the use and/or creation of the substance? *				
No				
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: **				

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Reductions due to additional actions taken ** The amount of reduction in use of the substance at the facility during the reporting period that resulted due to the additional actions. No Amount tonnes 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 tonnes 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 tonnes 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 tonnes 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 tonnes The amount of reduction in release to land of the substance at the facility during the reporting period that resulted due to additional actions. tonnes □ No Amount 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 tonnes 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 tonnes

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		tonnes
Amendments	3	
Amendments	8	
Were any amendm	nents made to the toxic s	substance reduction plan during the reporting period? *
No		
Description any an period **	nendments that were ma	ade to the toxic substance reduction plan during the reporting
Provide a public su reduction plan duri	Immary of the description of the reporting period of	n of any amendments that were made to the toxic substance
NA - 06, Co	oper (and its con	npounds)
NA - 06, Copper (and its compounds)	
Objectives, D	Description and T	argets
This information is changes to the info	read-only and is pulled	directly from your most recent submitted Plan Summary. To make please update your plan summary and re-submit. For more details
Objectives	771	·
Objectives in plan:	*	
DDi has successfu	ully implemented the tox	ic reduction option.
Lleo Targete		
Use Targets	orantod roduction	n in use of the toyic aubetones at the
	argeted reduction	n in use of the toxic substance at the
facility? *		
No quantity target	Quantity	Unit
X	or	
What is the t	argeted timefram	ne for this reduction? *
No timeline targe	•	years
\boxtimes	or	

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Description of Target			
Creation Targe	ıte		
		creation of the toxic substance a	t the
facility? *	9		
No quantity target	Quantity	Unit	
⊠ or	•		
What is the targ	geted timeframe for	or this reduction? *	
No timeline target	ye	ears	
X	or		
Description of targets			
Actions			
Additional Action	ons		
Were there any additionand/or creation of the	onal actions outside the pla substance? *	an taken during the reporting period to reduce the	ne use
No			
Describe any addition objectives: **	al actions that were taken d	during the reporting period to achieve the plan's	3
Provide a public sumr	mary of the description of the	ne additional action taken: **	
Reductions due	e to additional actio	ons taken **	
The amount of reduction that resulted due to the	ion in use e additional actions.	> of the substance at the facility during the repo	orting period
☐ No Amount		tonnes	

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		tonnes
The amount of reduction in the substance correporting period that resulted due to the additional action		at the facility during the
☐ No Amount		tonnes
The amount of reduction in release to air<td></td><td>ne facility during the</td>		ne facility during the
☐ No Amount		tonnes
The amount of reduction in release to water reporting period that resulted due to the additional actions.		at the facility during the
☐ No Amount		tonnes
The amount of reduction in release to land<td></td><td>the facility during the</td>		the facility during the
☐ No Amount		tonnes
The amount of reduction in the substance dis rocks) at the facility during the reporting period that res		
☐ No Amount		tonnes
The amount of reduction in the substance disrocks) at the facility during the reporting period that res	posed off-site (inc sulted due to the additional	cluding tailings and waste actions.
☐ No Amount		tonnes
The amount of reduction in the substance recreporting period that resulted due to the additional action		he facility during the
☐ No Amount		tonnes
Amendments		
Amendments		
Were any amendments made to the toxic substance re	eduction plan during the rep	porting period? *
No		

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Description any a period **	amendmer	nts that were ma	de to the toxic s	ubstance reduction plan o	during the reporting
Provide a public reduction plan du				nents that were made to t	the toxic substance
NA - 08, Le	•	•	ounds)		
NA - 08, Lead (a	and its com	npounds)			
Objectives,	Descri	otion and T	argets		
	nformation	on this screen, p	olease update y		Plan Summary. To make -submit. For more details
Objectives					
Objectives in plan	n: *				
DDi intends to re	educe the i	use of Lead in th	e HASL process	S.	
Use Targets	S				
What is the	targete	ed reduction	n in use of t	he toxic substanc	e at the
facility? *					
No quantity target		Quantity		Unit	
	or	90.83		kg	
What is the	targete	ed timefram	e for this re	eduction? *	
No timeline targ	•		years		
		or	2		
Description of Ta	ırget				
Q4 2014					
Creation Ta	rgets				
What is the	targete	ed reduction	n in creation	n of the toxic subs	stance at the

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facility? *		
No quantity target	Quantity	Unit
X o	r	
What is the tar	geted timeframe f	or this reduction? *
No timeline target		/ears
\boxtimes	or	
Description of targets	3	
Options		
Toxic Reduction	on Options Implem	ented
Equipment or p	process modification	ons
Modified equip	ment, layout or pi	oing
Activity		
Modified equipment,	layout or piping	
Describe the steps th	at were taken in the repor	ing period to implement the toxic reduction option: *
No specific steps cor	npleted	
Provide a public sum	mary of the description of	:he steps: *
Process is used less	frequently yr by yr. Only le	egacy PNs typically use solder.
Provide a comparison taken during the repo		scribed in the plan for implementation with the actual steps
Plan behind schedule	е.	
Provide a public sum	mary of the comparison of	the steps: *

Reductions due to Options Implemented

The amount of reduction in use of the substance at the facility during the reporting period that resulted due to the steps described:

Plan behind schedule but production has dropped 25% in 2014. Typcially ENIG is replacing solder finishing.

No Amount	kg	
The amount of reduction in creation period that resulted due to the steps described:	of the substance at the facility during the rep	orting
No Amount	kg	
The amount of reduction in the substance correporting period that resulted due to the steps describe	ntained in product at the facility duriced:	ng the
No Amount	kg	
The amount of reduction in release to airstrong>release to airstrong>reporting period that resulted due to the steps describe		е
No Amount	kg	
The amount of reduction in release to water reporting period that resulted due to the steps described		g the
No Amount	kg	
The amount of reduction in release to land<td>trong> of the substance at the facility during</td><td>the</td>	trong> of the substance at the facility during	the
No Amount	kg	
The amount of reduction in the substance dis rocks) at the facility during the reporting period that res	posed on-site (including tailings and ulted due to the steps described:	d waste
No Amount	kg	
The amount of reduction in the substance dis rocks) at the facility during the reporting period that res	posed off-site (including tailings and ulted due to the steps described:	d waste
No Amount	kg	
The amount of reduction in the substance recreporting period that resulted due to the steps describe		he
No Amount	kg	

Will the timelines in the current version of the plan will be met. *

No		
Comments		
Original plan was Q3 2014. Working with CI team in 2 dropped 25% in 2014	015. New timeline TBD, bu	ut Lead consumption has
Actions		
Additional Actions		
Were there any additional actions outside the plan take and/or creation of the substance? *	en during the reporting per	iod to reduce the use
Yes		
Describe any additional actions that were taken during objectives: **	the reporting period to acl	nieve the plan's
Sales discusses new and existing part numbers with cused.	customer base to see if nor	n solder finishes can be
Provide a public summary of the description of the add	litional action taken: **	
Sales discusses new and existing part numbers with cused, such as ENIG.	customer base to see if nor	n solder finishes can be
Reductions due to additional actions	taken **	
The amount of reduction in use of the that resulted due to the additional actions.	ne substance at the facility	during the reporting period
No Amount		kg
The amount of reduction in creation period that resulted due to the additional actions.	of the substance at the fa	cility during the reporting
No Amount		kg
The amount of reduction in the substance cor reporting period that resulted due to the additional acti	ntained in product ons.	> at the facility during the
No Amount		kg
The amount of reduction in release to air<td>ong> of the substance at tl ons.</td><td>he facility during the</td>	ong> of the substance at tl ons.	he facility during the
No Amount		kg

The amount of reduction in release to water of the substance at the facility during the

reporting period that resulted due to the additional acti	ons.			
No Amount	kg			
The amount of reduction in release to land<td></td>				
No Amount	kg			
The amount of reduction in the substance dis rocks) at the facility during the reporting period that res				
No Amount	kg			
The amount of reduction in the substance dis rocks) at the facility during the reporting period that res				
No Amount	kg			
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	kg			
Amendments				
Amendments				
Were any amendments made to the toxic substance reduction plan during the reporting period? *				
No				
Description any amendments that were made to the to period **	oxic substance reduction plan during the reporting			
Provide a public summary of the description of any am reduction plan during the reporting period **	nendments that were made to the toxic substance			
Provide a public summary of the description of any am reduction plan during the reporting period ** NA - 16, Ammonia (total) NA - 16, Ammonia (total)	nendments that were made to the toxic substance			

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Objectives,	Description	and	Tardets

This information is read-only and is pulled directly from your most recent submitted Plan Summary. To make changes to the information on this screen, please update your plan summary and re-submit. For more details about updating the plan summary, please select "Help".

about updating the pia	an summary, piease s	select Help.
Objectives		
Objectives in plan: *		
Viasystems intends to commitment	reduce NH3 but add	ditional research and testing is required prior to stating any
COMMUNICITIES		
Use Targets		
What is the tar	geted reduction	n in use of the toxic substance at the
facility? *		
No quantity target	Quantity	Unit
X oı		
What is the tar	geted timefram	ne for this reduction? *
No timeline target		years
$\overline{\mathbf{X}}$	or	
Description of Target		
Creation Targe	ts	
What is the tar	geted reduction	n in creation of the toxic substance at the
facility? *		
No quantity target	Quantity	Unit
× oı		
_		
What is the tar	geted timefram	ne for this reduction? *
No timeline target		years
×	or	
<u></u> -	.	

Description of targets

Options			
Toxic Reduction Options Implemented	d		
Good operator practice or training			
Other			
Activity			
Other			
Describe the steps that were taken in the reporting periods	iod to implement the toxic	reduction option: *	
Catagory 7: Ongoing LPA, training and Scrap Reduction	on Projects		
Provide a public summary of the description of the step	os: *		
Catagory 7: Ongoing LPA, training and Scrap Reduction	on Projects		
Provide a comparison of the steps that were described taken during the reporting period: *	in the plan for implementa	ition with the actual steps	
CI and LPA project initiatives ongoing to reduce scrap	rate which wil affect the SI	ES line	
Provide a public summary of the comparison of the ste	ps: *		
CI and LPA project initiatives ongoing to reduce scrap rate which wil affect the SES line			
Reductions due to Options Implement	ted		
The amount of reduction in use of the that resulted due to the steps described:	e substance at the facility	during the reporting period	
No Amount		tonnes	
The amount of reduction in creation period that resulted due to the steps described:	of the substance at the fac	cility during the reporting	
No Amount		tonnes	
The amount of reduction in the substance con reporting period that resulted due to the steps describe		at the facility during the	
No Amount		tonnes	

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	to	onnes
The amount of reduction in release to water< reporting period that resulted due to the steps describe		the facility during the
No Amount	to	onnes
The amount of reduction in release to land<td>strong> of the substance at th</td><td>ne facility during the</td>	strong> of the substance at th	ne facility during the
No Amount	to	onnes
The amount of reduction in the substance dis rocks) at the facility during the reporting period that res		
No Amount	to	onnes
The amount of reduction in the substance dis rocks) at the facility during the reporting period that res		
No Amount	to	onnes
The amount of reduction in the substance red reporting period that resulted due to the steps describe		e facility during the
No Amount	to	onnes
Will the timelines in the current version of the plan will	be met. *	
Yes		
Comments		
New SES line shall be installed in 2015. this will allow etchant. emptying Etchant supply tote options shall be		odule to conserve
Actions		
Additional Actions		
Were there any additional actions outside the plan tak and/or creation of the substance? *	en during the reporting period	d to reduce the use
No		

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 add	ditional action taken: **
Reductions due to additional actions	taken **
The amount of reduction in use of that resulted due to the additional actions.	he substance at the facility during the reporting perio
☐ No Amount	tonnes
The amount of reduction in creation period that resulted due to the additional actions.	> of the substance at the facility during the reporting
☐ No Amount	tonnes
The amount of reduction in the substance co reporting period that resulted due to the additional act	
☐ No Amount	tonnes
The amount of reduction in release to air<td></td>	
☐ No Amount	tonnes
The amount of reduction in release to water< reporting period that resulted due to the additional act	
☐ No Amount	tonnes
The amount of reduction in release to land<td></td>	
☐ No Amount	tonnes
The amount of reduction in the substance disrocks) at the facility during the reporting period that re-	
☐ No Amount	tonnes

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	tonnes
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	tonnes
Amendments	
Amendments	
Were any amendments made to the toxic substance reduction plan during the reporting period? *	
No	
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 **	

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