

Facility Report

Information for Irving Pulp & Paper, Limited

Reporting year	2022
Company	Irving Pulp & Paper, Limited
Company Mailing Address	408 Mill Street, Saint John, New Brunswick, E2M 3H1, Canada
Portable Facility?	No
NPRI ID	2604
Facility Physical Address	408 Mill Street, Saint John, New Brunswick, E2M 3H1, Canada

Facility details

Business number	871571907					
DUNS						
Number of full-time employee equivalents	487					
Contact information	Anne McInerney Vice President, Communications 506-632-4649 mcinerney.anne@jdirving.com English					
Parent company	Parent company	Percentage ownership	Address	Business number	DUNS Number	
	JD Irving	100.0000		102608726		
Typical days of operation	mon /tue /wed /thu /fri /sat /sun					
Operating hours	24.00					
Start time	06:00					
Shutdown periods	Period	Start	End	Duration (day)	Same Time Next Year	Partial Shutdown
	1	2022-05-01	2022-05-17	16	Yes	No
Activities	Activities with no employee threshold					
	None of the above					
	Activities that require Part 3 reporting					
	Combustion of fuel in kraft liquor boilers in forest products					

Report details

Type	NPRI Inventory
Last Updated	2023-05-30 12:15:14 PM
Other years' reports	1996, 1995, 1994, 1993, 2015, 2014, 2013, 2012, 2011, 2016, 2018, 2017, 2010, 2008, 2007, 2009, 2006, 1998, 2005, 2004, 2003, 2002, 2001, 2000, 1999, 1997, 2019, 2020, 2021, 2023, 2024
Facility is case 3	No
Facility is case 4	No

Geographical details

Latitude	45.262
Longitude	-66.0924
Datum	1983
Census sub-division	Saint John
Census division	Saint John
Economic area	Saint John--St. Stephen
Census metropolitan and agglomeration area	Saint John

Ecozone	Atlantic Maritime
Major drainage area	Maritime Provinces Drainage Area
Land survey description	
National Topograph Description	A-018-A/021-G-8
Additional information	

Industry details

Key industrial sector	Pulp and Paper
NAICS2	Manufacturing
NAICS4	Pulp, paper and paperboard mills
NAICS6 Primary	Chemical pulp mills
NAICS6 Secondary	
NAICS6 Tertiary	

Pollution prevention

Plan details

Pollution prevention

Does the facility have a P2 plan?	The facility does not have a P2 plan
Reason for plan preparation	
Recent update	The report was not updated during the reporting year
Target of plan	

Activities

Primary activity	Secondary activity	Comment
No data available		

Other environmental programs

Other facility identifiers

ID number	Program
G10386	GHGRP Identification Number

Permits

Permit number	Issuing Agency
I-11603	New Brunswick - Department of Environment and Local Government
I-11495	New Brunswick - Department of Environment and Local Government

Summary

Substance	CAS number	Units	Releases				Disposals and Transfers				Voluntary Report
			Air	Water	Land	Total	On-site disposals	Off-site disposals	Off-site treatment	Off-site recycling	
7H-Dibenzo[c, 194-59-2 g]carbazole		kg	-	-	-	0.000	-	-	-	-	
Acenaphthene	83-32-9	kg	1.105	-	-	1.105	-	-	-	-	
Acenaphthylen	208-96-8	kg	8.505	-	-	8.505	-	-	-	-	
Ammonia (total)	NA - 16	tonnes	48.326	15.934	-	64.259	-	-	0.220	-	
Arsenic (and its compounds)	NA - 02	kg	0.735	-	-	0.735	-	-	0.034	64.466	
Benz[a]anthrac	56-55-3	kg	1.928	-	-	1.928	-	-	-	0.626	

(expressed as hydrogen sulphide)	NA - M14	tonnes	12.744	-	-	12.744	-	-	-	-
Volatile Organic Compounds (Total)	NA - M16	tonnes	227.260	-	-	227.260	-	-	-	-
Zinc (and its compounds)	NA - 14	tonnes	0.117	1.718	-	1.835	-	-	0.004	11.095

Comments

Substance	CAS number	Comment Type	Comment
7H-Dibenzo[c,g]carbazole	194-59-2	Substance criteria comment	No emission factors available
7H-Dibenzo[c,g]carbazole	194-59-2	Recycling comment	No published emission factors
7H-Dibenzo[c,g]carbazole	194-59-2	On-site releases comment	No emission factors for discharges to air or effluent
Acenaphthene	83-32-9	On-site releases comment	More bark, heavy fuel oil and natural gas burned
Acenaphthylene	208-96-8	Recycling comment	No emission factors
Ammonia (total)	NA - 16	Disposal comment	Recovery boiler underwent an acid wash in 2021. Materials generated through the acid wash were collected and sent offsite for disposal/treatment. There was no acid wash of the Recovery Boiler in 2021.
Arsenic (and its compounds)	NA - 02	Substance criteria comment	MPO threshold met for 2022 therefore reporting required.
Arsenic (and its compounds)	NA - 02	Disposal comment	Recovery boiler underwent an acid wash in 2021. Materials generated through the acid wash were collected and sent offsite for disposal/treatment. There was no acid wash of the Recovery Boiler in 2021.
Arsenic (and its compounds)	NA - 02	Recycling comment	Higher measured concentration in ash and bottom ash, more ash and bottom ash sent offsite
Arsenic (and its compounds)	NA - 02	Reason why substance was added to the report	Total "MPO" greater than 50 kg threshold, therefore reporting on releases required. Increased measured concentration in ash and bottom ash sent offsite.
Arsenic (and its compounds)	NA - 02	On-site releases comment	No detectable levels found in effluent samples, therefore no Releases to water bodies are reported.
Benz[a]anthracene	56-55-3	Recycling comment	More ash distributed to farmers, more bottom ash sent to compost facility
Benzo[a]pyrene	50-32-8	On-site releases comment	More bark burned
Benzo[a]pyrene	50-32-8	Recycling comment	More ash distributed to farmers, more bottom ash sent to composite facility
Benzo[b]fluoranthene	205-99-2	Recycling comment	More ash distributed to farmers, more bottom ash sent to compost facility
Benzo[ghi]perylene	191-24-2	Recycling comment	More ash distributed to farmers, more bottom ash sent to compost site
Benzo[j]fluoranthene	205-82-3	On-site releases comment	More bark burned. No emission factor for effluent releases to water bodies
Benzo[k]fluoranthene	207-08-9	On-site releases comment	No emission factors for direct discharges/releases to water bodies.
Benzo[k]fluoranthene	207-08-9	Recycling comment	More bottom ash sent to compost facility
Cadmium (and its compounds)	NA - 03	Recycling comment	Increase in measured concentration in dregs and ash; more dregs and ash sent offsite.
Chlorine dioxide	10049-04-4	On-site releases comment	Lower ClO2 concentration measured at ClO2 vent scrubber, D1/E1 washer hood vent during last stack testing event.
Chrysene	218-01-9	Recycling comment	More ash to distributed to farmers
Cobalt (and its compounds)	NA - 05	Disposal comment	Recovery boiler underwent an acid wash in 2021. Materials generated through the acid wash were collected and sent offsite for disposal/treatment. There was no acid wash of the Recovery Boiler in 2021.
Cobalt (and its compounds)	NA - 05	Recycling comment	Higher concentrations measured in all residuals; more residuals sent offsite.
Dibenz[a,h]anthracene	53-70-3	Recycling comment	More ash to farmers, more bottom ash to compost site
Dibenz[a,j]acridine	224-42-0	On-site releases comment	Not detectable in effluent per published emission factors (no emission factor), no emission factors for stack or point releases

Dibenz[a,j]acridine	224-42-0	Recycling comment	No emission factors
Dibenzo[a,i]pyrene	189-55-9	On-site releases comment	No emission factors available for air releases or effluent
Dibenzo[a,i]pyrene	189-55-9	Recycling comment	No emission factors available
Dioxins and furans - total	NA - D/F	Recycling comment	Total is below the LOQ of 9 pg/g.
Fluoranthene	206-44-0	On-site releases comment	No emission factor for effluent (releases to water bodies)
Fluoranthene	206-44-0	Recycling comment	More ash distributed to farmers, more bottom ash sent to compost facility.
Fluorene	86-73-7	On-site releases comment	More bark, heavy fuel oil and natural gas burned
Formaldehyde	50-00-0	On-site releases comment	Decrease in measured concentration in effluent and fewer operating days compared to 2021
Hexavalent chromium (and its compounds)	NA - 19	Recycling comment	More ash distributed to farmers, more bottom ash sent to compost site.
Hydrochloric acid	7647-01-0	Substance criteria comment	Met MPO threshold due to use as a reactant during the acid wash of the recovery boiler.
Hydrochloric acid	7647-01-0	On-site releases comment	Used as a reactant during acid wash of recovery boiler.
Hydrochloric acid	7647-01-0	Reason why substance was added to the report	Total "MPO" greater than 10 tonne threshold, therefore required to report releases. Hydrochloric acid used as a reactant during chemical cleaning of Recovery Boiler in 2022, which did not occur in 2021.
Indeno[1,2,3-cd]pyrene	193-39-5	Recycling comment	More ash distributed to farmers
Lead (and its compounds)	NA - 08	Disposal comment	Recovery boiler underwent an acid wash in 2021. Materials generated through the acid wash were collected and sent offsite for disposal/treatment. There was no acid wash of the Recovery Boiler in 2021.
Lead (and its compounds)	NA - 08	Recycling comment	Lower concentrations measured in lime mud, grits and bottom ash
Manganese (and its compounds)	NA - 09	Disposal comment	Recovery boiler underwent an acid wash in 2021. Materials generated through the acid wash were collected and sent offsite for disposal/treatment. There was no acid wash of the Recovery Boiler in 2021.
Manganese (and its compounds)	NA - 09	Recycling comment	More ash sent to farmers, more grits, dregs and bottom ash sent to compost facility
Methanol	67-56-1	On-site releases comment	Lower measured concentration in effluent
Nitrate ion in solution at pH >= 6.0	NA - 17	On-site releases comment	Lower measured concentration in effluent
Perylene	198-55-0	On-site releases comment	No emission factor for effluent direct discharges to water
Perylene	198-55-0	Recycling comment	No published emission factors
Phenanthrene	85-01-8	Recycling comment	More ash distributed to farmers, more bottom ash sent to compost facility
Phosphorus (total)	NA - 22	Disposal comment	Recovery boiler underwent an acid wash in 2021. Materials generated through the acid wash were collected and sent offsite for disposal/treatment. There was no acid wash of the Recovery Boiler in 2021.
Phosphorus (total)	NA - 22	Recycling comment	More solid residuals sent offsite
PM10 - Particulate Matter <= 10 Micrometers	NA - M09	On-site releases comment	Lower emission rates measured during annual stack testing on Lime Kiln (-34%) and Recovery Boiler (-57%).
PM2.5 - Particulate Matter <= 2.5 Micrometers	NA - M10	On-site releases comment	Lower emission rates measured during annual stack testing on Lime Kiln (-34%) and Recovery Boiler (-57%).
Pyrene	129-00-0	Recycling comment	More ash to farmers, more bottom ash to compost site
Sulphuric acid	7664-93-9	On-site releases comment	MPO greater than threshold, therefore required to report releases.
Total particulate matter	NA - M08	On-site releases comment	Lower emission rates measured during annual stack testing on Lime Kiln (-34%) and Recovery Boiler (-57%).
Zinc (and its compounds)	NA - 14	Disposal comment	Recovery boiler underwent an acid wash in 2021. Materials generated through the acid wash were collected and sent offsite for disposal/treatment. There was no acid wash of the Recovery Boiler in 2021.
Zinc (and its compounds)	NA - 14	Recycling comment	Increase in measured concentration in lime mud and grits; more grits and more ash sent offsite.

Release to air

Substance	CAS number	Units	Stack/Point	Storage/Han	Fugitive	Spills	Road Dust	Other	Total
			ddling						
Acenaphthene	83-32-9	kg	1.105	-	-	-	-	-	1.105
Acenaphthylene	208-96-8	kg	8.505	-	-	-	-	-	8.505
Ammonia (total)	NA - 16	tonnes	48.326	-	-	-	-	-	48.326
Arsenic (and its compounds)	NA - 02	kg	0.735	-	-	-	-	-	0.735
Benz[a]anthracene	56-55-3	kg	1.928	-	-	-	-	-	1.928
Benzo[a]pyrene	50-32-8	kg	3.213	-	-	-	-	-	3.213
Benzo[b]fluoranthene	205-99-2	kg	0.858	-	-	-	-	-	0.858
Benzo[e]pyrene	192-97-2	kg	0.247	-	-	-	-	-	0.247
Benzo[ghi]perylene	191-24-2	kg	0.404	-	-	-	-	-	0.404
Benzo[j]fluoranthene	205-82-3	kg	0.173	-	-	-	-	-	0.173
Benzo[k]fluoranthene	207-08-9	kg	0.597	-	-	-	-	-	0.597
Cadmium (and its compounds)	NA - 03	kg	4.132	-	-	-	-	-	4.132
Carbon monoxide	630-08-0	tonnes	2069.142	-	-	-	-	-	2069.142
Chlorine dioxide	10049-04-4	tonnes	6.268	-	-	-	-	-	6.268
Chrysene	218-01-9	kg	7.624	-	-	-	-	-	7.624
Cobalt (and its compounds)	NA - 05	kg	3.982	-	-	-	-	-	3.982
Dibenz[a,h]anthracene	53-70-3	kg	0.286	-	-	-	-	-	0.286
Dioxins and furans - total	NA - D/F	g TEQ	0.008	-	-	-	-	-	0.008
Fluoranthene	206-44-0	kg	33.887	-	-	-	-	-	33.887
Fluorene	86-73-7	kg	4.130	-	-	-	-	-	4.130
Formaldehyde	50-00-0	tonnes	3.234	-	-	-	-	-	3.234
Hexavalent chromium (and its compounds)	NA - 19	kg	6.664	-	-	-	-	-	6.664
Hydrochloric acid	7647-01-0	tonnes	4.408	-	-	-	-	-	4.408
Indeno[1,2,3-cd]pyrene	193-39-5	kg	0.409	-	-	-	-	-	0.409
Lead (and its compounds)	NA - 08	kg	14.661	-	-	-	-	-	14.661
Manganese (and its compounds)	NA - 09	tonnes	0.086	-	-	-	-	-	0.086
Methanol	67-56-1	tonnes	81.171	-	-	-	-	-	81.171
Nitrogen oxides (expressed as nitrogen dioxide)	11104-93-1	tonnes	931.753	-	-	-	-	-	931.753
Perylene	198-55-0	kg	0.029	-	-	-	-	-	0.029
Phenanthrene	85-01-8	kg	112.848	-	-	-	-	-	112.848
Phosphorus (total)	NA - 22	tonnes	0.224	-	-	-	-	-	0.224
PM10 - Particulate Matter <= 10 Micrometers	NA - M09	tonnes	77.401	-	-	-	-	-	77.401
PM2.5 - Particulate Matter <= 2.5 Micrometers	NA - M10	tonnes	46.380	-	-	-	-	-	46.380
Pyrene	129-00-0	kg	28.507	-	-	-	-	-	28.507
Sulphur dioxide	7446-09-5	tonnes	491.326	-	-	-	-	-	491.326
Sulphuric acid	7664-93-9	tonnes	1.845	-	-	-	-	-	1.845
Total particulate matter	NA - M08	tonnes	99.751	-	-	-	-	-	99.751
Total reduced sulphur (expressed as hydrogen sulphide)	NA - M14	tonnes	12.744	-	-	-	-	-	12.744
Volatile Organic	NA - M16	tonnes	227.260	-	-	-	-	-	227.260

Compounds (Total)	NA - M16	tonnes	227.260	-	-	-	-	-	227.260
Zinc (and its compounds)	NA - 14	tonnes	0.117	-	-	-	-	-	0.117

Releases to water

Substance	CAS number	Units	Direct Discharges	Leaks	Spills	Total
Ammonia (total)	NA - 16	tonnes	15.934	-	-	15.934
Cadmium (and its compounds)	NA - 03	kg	30.064	-	-	30.064
Cobalt (and its compounds)	NA - 05	kg	2.053	-	-	2.053
Formaldehyde	50-00-0	tonnes	2.074	-	-	2.074
Hexavalent chromium (and its compounds)	NA - 19	kg	31.454	-	-	31.454
Lead (and its compounds)	NA - 08	kg	25.264	-	-	25.264
Manganese (and its compounds)	NA - 09	tonnes	22.090	-	-	22.090
Methanol	67-56-1	tonnes	25.070	-	-	25.070
Nitrate ion in solution at pH >= 6.0	NA - 17	tonnes	59.578	-	-	59.578
Phosphorus (total)	NA - 22	tonnes	42.475	-	-	42.475
Pyrene	129-00-0	kg	1.326	-	-	1.326
Zinc (and its compounds)	NA - 14	tonnes	1.718	-	-	1.718

Off-site disposals

Substance	CAS number	Units	Physical Treatment	Chemical Treatment	Biological Treatment	Incineration	Municipal sewage treatment plant	Total
Ammonia (total)	NA - 16	tonnes	-	-	0.2204	-	-	0.220
Arsenic (and its compounds)	NA - 02	kg	0.0343	-	-	-	-	0.034
Cobalt (and its compounds)	NA - 05	kg	0.3085	-	0.0128	-	-	0.321
Lead (and its compounds)	NA - 08	kg	1.2854	-	0.0352	-	-	1.321
Manganese (and its compounds)	NA - 09	tonnes	0.3764	1.3110	0.2345	-	-	1.922
Phosphorus (total)	NA - 22	tonnes	0.3556	-	0.0028	-	-	0.358
Zinc (and its compounds)	NA - 14	tonnes	0.0041	-	0.0000	-	-	0.004

Transfers for off-site recycling

Substance	CAS number	Units	Recovery of Energy	Recovery of Solvents	Recovery of Organics (not solvents)	Recovery of Inorganic (not metals)	Recovery of Metals	Recovery of Acids or Bases	Recovery of Catalysts	Recovery of Pollution Abatement Residues	Refining or reuse of used oil	Other	Total
Arsenic (and its compounds)	NA - 02	kg	-	-	-	-	-	-	-	64.4662	-	-	64.466
Benz[a]anthracene	56-55-3	kg	-	-	-	-	-	-	-	0.6261	-	-	0.626
Benzo[a]pyrene	50-32-8	kg	-	-	-	-	-	-	-	0.5539	-	-	0.554
Benzo[b]fluoranthene	205-99-2	kg	-	-	-	-	-	-	-	1.2234	-	-	1.223
Benzo[ghi]perylene	191-24-2	kg	-	-	-	-	-	-	-	0.5801	-	-	0.580
Benzo[k]fluoranthene	207-08-9	kg	-	-	-	-	-	-	-	0.4620	-	-	0.462

Cadmium (and its compounds)	NA - 03	kg	-	-	-	-	-	-	-	75.6820	-	-	75.682
Chrysene	218-01-9	kg	-	-	-	-	-	-	-	0.1641	-	-	0.164
Cobalt (and its compounds)	NA - 05	kg	-	-	-	-	-	-	-	89.8293	-	-	89.829
Dibenz[a,h]anthracene	53-70-3	kg	-	-	-	-	-	-	-	0.5736	-	-	0.574
Fluoranthene	206-44-0	kg	-	-	-	-	-	-	-	1.1305	-	-	1.131
Hexavalent chromium (and its compounds)	NA - 19	kg	-	-	-	-	-	-	-	175.2791	-	-	175.279
Indeno[1,2,3-cd]pyrene	193-39-5	kg	-	-	-	-	-	-	-	0.0919	-	-	0.092
Lead (and its compounds)	NA - 08	kg	-	-	-	-	-	-	-	167.7142	-	-	167.714
Manganese (and its compounds)	NA - 09	tonnes	-	-	-	-	-	-	-	178.9174	-	-	178.917
Phenanthrene	85-01-8	kg	-	-	-	-	-	-	-	4.9027	-	-	4.903
Phosphorus (total)	NA - 22	tonnes	-	-	-	-	-	-	-	56.2669	-	-	56.267
Pyrene	129-00-0	kg	-	-	-	-	-	-	-	1.3295	-	-	1.329
Zinc (and its compounds)	NA - 14	tonnes	-	-	-	-	-	-	-	11.0951	-	-	11.095

Other years data

Year	CAS number	Substance Units	Releases				Disposals and Transfers			
			Air	Water	Land	Total	On-site disposals	Off-site disposals	Off-site treatment	Off-site recycling
2024	194-59-2	7H-Dibenzo[c, g]carbazole, kg	-	-	-	0.000	-	-	-	-
2023	194-59-2	7H-Dibenzo[c, g]carbazole, kg	-	-	-	0.000	-	-	-	-
2021	194-59-2	7H-Dibenzo[c, g]carbazole, kg	-	0.000	-	0.000	-	-	-	-
2020	194-59-2	7H-Dibenzo[c, g]carbazole, kg	-	-	-	0.000	-	-	-	-
2019	194-59-2	7H-Dibenzo[c, g]carbazole, kg	-	-	-	0.000	-	-	-	-
2018	194-59-2	7H-Dibenzo[c, g]carbazole, kg	-	-	-	0.000	-	-	-	-
2017	194-59-2	7H-Dibenzo[c, g]carbazole, kg	-	-	-	0.000	-	-	-	-
2016	194-59-2	7H-Dibenzo[c, g]carbazole, kg	-	-	-	0.000	-	-	-	-
2015	194-59-2	7H-Dibenzo[c, g]carbazole, kg	-	-	-	0.000	-	-	-	-
2014	194-59-2	7H-Dibenzo[c, g]carbazole, kg	-	-	-	0.000	-	-	-	-
2013	194-59-2	7H-Dibenzo[c, g]carbazole, kg	-	-	-	0.000	-	-	-	-
2012	194-59-2	7H-Dibenzo[c, g]carbazole, kg	-	-	-	0.000	-	-	-	-
2011	194-59-2	7H-Dibenzo[c, g]carbazole, kg	-	-	-	0.000	-	-	-	-
2010	194-59-2	7H-Dibenzo[c, g]carbazole, kg	-	-	-	0.000	-	-	-	-
2009	194-59-2	7H-Dibenzo[c, g]carbazole, kg	-	-	-	0.000	-	-	-	-
2008	194-59-2	7H-Dibenzo[c, g]carbazole, kg	-	-	-	0.000	-	-	-	-
2007	194-59-2	7H-Dibenzo[c, g]carbazole, kg	-	-	-	0.000	-	-	-	-
2006	194-59-2	7H-Dibenzo[c, g]carbazole, kg	-	-	-	0.000	-	-	-	-
2005	194-59-2	7H-Dibenzo[c, g]carbazole, kg	-	-	-	0.000	-	-	-	-

2004	194-59-2	7H-Dibenzo[c, kg g]carbazole	-	-	-	0.000	-	-	-	-
2003	194-59-2	7H-Dibenzo[c, kg g]carbazole	0.000	-	-	0.000	0.000	-	-	-
2002	194-59-2	7H-Dibenzo[c, kg g]carbazole	0.000	-	-	0.000	0.000	-	-	-
2001	194-59-2	7H-Dibenzo[c, kg g]carbazole	0.000	-	-	0.000	0.000	-	-	-
2000	194-59-2	7H-Dibenzo[c, kg g]carbazole	0.000	-	-	0.000	0.000	-	-	-
2024	83-32-9	Acenaphthene kg	0.961	-	-	0.961	-	-	-	0.395
2023	83-32-9	Acenaphthene kg	1.018	-	-	1.018	-	-	-	-
2021	83-32-9	Acenaphthene kg	0.989	-	-	0.989	-	-	-	-
2020	83-32-9	Acenaphthene kg	1.035	-	-	1.035	-	-	-	-
2019	83-32-9	Acenaphthene kg	0.882	-	-	0.882	-	-	-	-
2018	83-32-9	Acenaphthene kg	1.010	-	-	1.010	-	-	-	-
2017	83-32-9	Acenaphthene kg	1.026	-	-	1.026	-	-	-	-
2016	83-32-9	Acenaphthene kg	1.067	-	-	1.067	-	-	-	-
2015	83-32-9	Acenaphthene kg	0.830	-	-	0.830	-	-	-	-
2014	83-32-9	Acenaphthene kg	1.062	-	-	1.062	-	-	-	-
2013	83-32-9	Acenaphthene kg	1.260	-	-	1.260	-	-	-	-
2012	83-32-9	Acenaphthene kg	1.220	-	-	1.220	-	-	-	-
2011	83-32-9	Acenaphthene kg	1.081	-	-	1.081	-	-	-	-
2009	83-32-9	Acenaphthene kg	1.097	-	-	1.097	-	-	-	-
2008	83-32-9	Acenaphthene kg	1.128	-	-	1.128	-	-	-	-
2007	83-32-9	Acenaphthene kg	0.694	-	-	0.694	-	-	-	-
2006	83-32-9	Acenaphthene kg	-	-	-	0.000	-	-	-	-
2024	208-96-8	Acenaphthylen kg e	7.818	-	-	7.818	-	-	-	0.106
2023	208-96-8	Acenaphthylen kg e	8.176	-	-	8.176	-	-	-	-
2021	208-96-8	Acenaphthylen kg e	7.967	-	-	7.967	-	-	-	-
2020	208-96-8	Acenaphthylen kg e	8.270	-	-	8.270	-	-	-	-
2019	208-96-8	Acenaphthylen kg e	7.334	-	-	7.334	-	-	-	-
2018	208-96-8	Acenaphthylen kg e	7.845	-	-	7.845	-	-	-	-
2017	208-96-8	Acenaphthylen kg e	8.094	-	-	8.094	-	-	-	-
2016	208-96-8	Acenaphthylen kg e	8.350	-	-	8.350	-	-	-	-
2015	208-96-8	Acenaphthylen kg e	6.815	-	-	6.815	-	-	-	-
2014	208-96-8	Acenaphthylen kg e	8.061	-	-	8.061	-	-	-	-
2013	208-96-8	Acenaphthylen kg e	9.251	-	-	9.251	-	-	-	-
2012	208-96-8	Acenaphthylen kg e	8.994	-	-	8.994	-	-	-	-
2011	208-96-8	Acenaphthylen kg e	8.172	-	-	8.172	-	-	-	-
2010	208-96-8	Acenaphthylen kg e	9.346	-	-	9.346	-	-	-	-
2009	208-96-8	Acenaphthylen kg e	8.070	-	-	8.070	-	-	-	-
2008	208-96-8	Acenaphthylen kg e	8.143	-	-	8.143	-	-	-	-
2007	208-96-8	Acenaphthylen kg e	5.849	-	-	5.849	-	-	-	-
2006	208-96-8	Acenaphthylen kg e	-	-	-	0.000	-	-	-	-
2010	75-07-0	Acetaldehyde tonnes	8.349	0.000	-	8.349	-	-	-	-
2009	75-07-0	Acetaldehyde tonnes	8.129	0.000	-	8.129	-	-	-	-
2008	75-07-0	Acetaldehyde tonnes	7.686	0.000	-	7.686	-	-	-	-
2007	75-07-0	Acetaldehyde tonnes	8.859	0.000	-	8.859	-	-	-	-
2006	75-07-0	Acetaldehyde tonnes	10.813	0.000	-	10.813	-	-	-	-
2005	75-07-0	Acetaldehyde tonnes	10.784	0.000	-	10.784	-	-	-	-
2004	75-07-0	Acetaldehyde tonnes	10.836	7.899	-	18.735	-	-	-	-
2003	75-07-0	Acetaldehyde tonnes	10.626	7.450	-	18.076	-	-	-	-
2002	75-07-0	Acetaldehyde tonnes	10.643	7.296	-	17.939	-	-	-	-
2001	75-07-0	Acetaldehyde tonnes	10.230	7.130	-	17.360	-	-	-	-
2000	75-07-0	Acetaldehyde tonnes	10.100	6.720	-	16.820	-	-	-	-
1999	75-07-0	Acetaldehyde tonnes	8.600	6.490	-	15.090	-	-	-	-
2024	NA - 16	Ammonia tonnes (total)	49.090	12.450	-	61.540	-	-	-	-

2023	NA - 16	Ammonia (total)	tonnes	50.351	15.997	-	66.348	-	-	-	-
2021	NA - 16	Ammonia (total)	tonnes	50.342	20.961	0.000	71.303	-	-	-	-
2020	NA - 16	Ammonia (total)	tonnes	50.261	24.790	-	75.051	-	-	-	-
2019	NA - 16	Ammonia (total)	tonnes	49.070	20.723	-	69.793	-	-	-	-
2018	NA - 16	Ammonia (total)	tonnes	44.839	41.769	-	86.608	-	-	0.455	-
2017	NA - 16	Ammonia (total)	tonnes	48.546	27.192	-	75.738	-	-	-	-
2016	NA - 16	Ammonia (total)	tonnes	48.825	21.263	-	70.088	-	-	-	-
2015	NA - 16	Ammonia (total)	tonnes	45.087	19.069	-	64.156	-	-	-	-
2014	NA - 16	Ammonia (total)	tonnes	44.145	22.654	-	66.799	-	-	-	-
2013	NA - 16	Ammonia (total)	tonnes	45.522	31.261	-	76.783	-	-	-	-
2012	NA - 16	Ammonia (total)	tonnes	45.106	35.017	-	80.123	-	-	-	-
2011	NA - 16	Ammonia (total)	tonnes	43.775	19.356	-	63.131	-	-	-	-
2010	NA - 16	Ammonia (total)	tonnes	45.076	15.309	-	60.385	-	-	-	-
2009	NA - 16	Ammonia (total)	tonnes	43.715	16.273	-	59.988	-	-	-	-
2008	NA - 16	Ammonia (total)	tonnes	42.690	7.751	-	50.441	-	-	-	-
2007	NA - 16	Ammonia (total)	tonnes	42.007	12.553	-	54.560	-	-	-	-
2006	NA - 16	Ammonia (total)	tonnes	53.324	20.554	-	73.878	-	-	-	-
2005	NA - 16	Ammonia (total)	tonnes	52.595	33.494	-	86.089	-	-	-	-
2004	NA - 16	Ammonia (total)	tonnes	54.503	42.304	-	96.807	-	-	-	-
2003	NA - 16	Ammonia (total)	tonnes	53.820	24.870	-	78.690	-	-	-	-
2002	NA - 16	Ammonia (total)	tonnes	53.820	23.374	-	77.194	-	-	-	-
2001	NA - 16	Ammonia (total)	tonnes	53.520	15.140	-	68.660	-	-	-	-
2000	NA - 16	Ammonia (total)	tonnes	52.530	3.300	-	55.830	-	-	-	-
1999	NA - 16	Ammonia (total)	tonnes	49.370	-	-	49.370	-	-	-	-
2024	120-12-7	Anthracene	kg	-	-	-	0.000	-	-	-	0.824
2024	NA - 02	Arsenic (and its compounds)	kg	0.524	-	-	0.524	-	-	1.094	72.823
2020	NA - 02	Arsenic (and its compounds)	kg	0.628	0.000	-	0.628	-	-	-	53.620
2019	NA - 02	Arsenic (and its compounds)	kg	0.865	27.185	-	28.050	-	-	-	47.957
2016	NA - 02	Arsenic (and its compounds)	kg	0.611	0.000	-	0.611	-	-	-	29.674
2015	NA - 02	Arsenic (and its compounds)	kg	0.717	23.964	-	24.681	-	-	-	37.754
2014	NA - 02	Arsenic (and its compounds)	kg	0.651	28.951	-	29.602	-	-	-	42.169
2013	NA - 02	Arsenic (and its compounds)	kg	0.707	25.239	-	25.946	-	-	-	41.676
2012	NA - 02	Arsenic (and its compounds)	kg	0.766	22.152	-	22.918	-	-	-	95.945
2011	NA - 02	Arsenic (and its compounds)	kg	0.641	29.290	-	29.931	-	-	-	55.258
2010	NA - 02	Arsenic (and its compounds)	kg	0.897	0.000	-	0.897	0.000	-	-	62.143
2009	NA - 02	Arsenic (and its compounds)	kg	1.038	0.000	-	1.038	9.240	-	-	55.894
2008	NA - 02	Arsenic (and its compounds)	kg	1.071	0.000	-	1.071	8.928	-	-	45.580
2007	NA - 02	Arsenic (and its compounds)	kg	3.765	0.000	-	3.765	9.798	-	-	41.182
2006	NA - 02	Arsenic (and its compounds)	kg	27.854	25.034	-	52.888	8.628	-	-	44.407

2005	NA - 02	Arsenic (and its compounds)	kg	28.689	39.737	-	68.426	8.720	-	-	39.210
2004	NA - 02	Arsenic (and its compounds)	kg	11.439	217.234	-	228.673	39.250	-	-	17.850
2003	NA - 02	Arsenic (and its compounds)	kg	11.400	204.870	-	216.270	50.310	-	-	-
2002	NA - 02	Arsenic (and its compounds)	kg	12.100	200.640	-	212.740	97.390	-	-	-
1993	1332-21-4	Asbestos	tonnes	-	-	-	0.000	-	20.000	-	-
2024	56-55-3	Benz[a]anthracene	kg	1.968	-	-	1.968	-	-	-	2.442
2023	56-55-3	Benz[a]anthracene	kg	2.009	-	-	2.009	-	-	-	0.548
2021	56-55-3	Benz[a]anthracene	kg	1.991	-	-	1.991	-	-	-	0.457
2020	56-55-3	Benz[a]anthracene	kg	2.012	-	-	2.012	-	-	-	0.454
2019	56-55-3	Benz[a]anthracene	kg	1.947	-	-	1.947	-	-	-	0.548
2018	56-55-3	Benz[a]anthracene	kg	1.799	-	-	1.799	-	-	-	0.431
2017	56-55-3	Benz[a]anthracene	kg	1.929	-	-	1.929	-	-	-	0.294
2016	56-55-3	Benz[a]anthracene	kg	1.946	-	-	1.946	-	-	-	0.380
2015	56-55-3	Benz[a]anthracene	kg	1.791	-	-	1.791	-	-	-	0.299
2014	56-55-3	Benz[a]anthracene	kg	1.778	-	-	1.778	-	-	-	0.329
2013	56-55-3	Benz[a]anthracene	kg	1.844	-	-	1.844	-	-	-	0.382
2012	56-55-3	Benz[a]anthracene	kg	1.821	-	-	1.821	-	-	-	0.333
2011	56-55-3	Benz[a]anthracene	kg	1.767	-	-	1.767	-	-	-	0.290
2010	56-55-3	Benz[a]anthracene	kg	1.843	-	0.000	1.843	-	-	-	0.352
2009	56-55-3	Benz[a]anthracene	kg	1.780	-	0.000	1.780	-	-	-	0.326
2008	56-55-3	Benz[a]anthracene	kg	1.719	-	0.000	1.719	-	-	-	0.338
2007	56-55-3	Benz[a]anthracene	kg	1.743	-	0.000	1.743	-	-	-	0.384
2006	56-55-3	Benz[a]anthracene	kg	4.711	-	0.000	4.711	-	-	-	0.782
2005	56-55-3	Benz[a]anthracene	kg	4.620	-	0.000	4.620	-	-	-	0.810
2004	56-55-3	Benz[a]anthracene	kg	4.835	-	0.300	5.135	0.300	-	-	-
2003	56-55-3	Benz[a]anthracene	kg	4.778	-	-	4.778	1.100	-	-	-
2002	56-55-3	Benz[a]anthracene	kg	4.778	-	-	4.778	1.150	-	-	-
2001	56-55-3	Benz[a]anthracene	kg	4.760	-	-	4.760	1.640	-	-	-
2000	56-55-3	Benz[a]anthracene	kg	4.690	-	-	4.690	3.210	-	-	-
2014	71-43-2	Benzene	tonnes	0.929	0.174	-	1.103	-	-	-	-
2013	71-43-2	Benzene	tonnes	1.009	0.189	-	1.198	-	-	-	-
2010	71-43-2	Benzene	tonnes	1.016	0.188	-	1.204	-	-	-	-
2024	50-32-8	Benzo[a]pyrene	kg	2.805	-	-	2.805	-	-	-	2.518
2023	50-32-8	Benzo[a]pyrene	kg	2.976	-	-	2.976	-	-	-	0.502
2021	50-32-8	Benzo[a]pyrene	kg	2.890	-	-	2.890	-	-	-	0.409
2020	50-32-8	Benzo[a]pyrene	kg	3.020	-	-	3.020	-	-	-	0.377
2019	50-32-8	Benzo[a]pyrene	kg	2.575	-	-	2.575	-	-	-	0.469
2018	50-32-8	Benzo[a]pyrene	kg	2.941	-	-	2.941	-	-	-	0.372
2017	50-32-8	Benzo[a]pyrene	kg	2.995	-	-	2.995	-	-	-	0.239
2016	50-32-8	Benzo[a]pyrene	kg	3.117	-	-	3.117	-	-	-	0.311
2015	50-32-8	Benzo[a]pyrene	kg	2.405	-	-	2.405	-	-	-	0.243

2015	50-32-8	e kg	2.405	-	-	2.405	-	-	-	0.243
2014	50-32-8	Benzo[a]pyren e kg	3.069	-	-	3.069	-	-	-	0.261
2013	50-32-8	Benzo[a]pyren e kg	3.655	-	-	3.655	-	-	-	0.316
2012	50-32-8	Benzo[a]pyren e kg	3.537	-	-	3.537	-	-	-	0.273
2011	50-32-8	Benzo[a]pyren e kg	3.134	-	-	3.134	-	-	-	0.239
2010	50-32-8	Benzo[a]pyren e kg	3.694	0.000	-	3.694	-	-	-	0.290
2009	50-32-8	Benzo[a]pyren e kg	3.068	0.000	-	3.068	-	-	-	0.268
2008	50-32-8	Benzo[a]pyren e kg	3.161	-	-	3.161	-	-	-	0.278
2007	50-32-8	Benzo[a]pyren e kg	1.872	-	-	1.872	-	-	-	0.317
2006	50-32-8	Benzo[a]pyren e kg	1.668	-	-	1.668	-	-	-	2.624
2005	50-32-8	Benzo[a]pyren e kg	1.641	-	0.000	1.641	-	-	-	2.700
2004	50-32-8	Benzo[a]pyren e kg	1.706	-	1.000	2.706	1.000	-	-	-
2003	50-32-8	Benzo[a]pyren e kg	1.684	-	-	1.684	3.600	-	-	-
2002	50-32-8	Benzo[a]pyren e kg	1.684	-	-	1.684	3.870	-	-	-
2001	50-32-8	Benzo[a]pyren e kg	1.670	-	-	1.670	8.060	-	-	-
2000	50-32-8	Benzo[a]pyren e kg	1.640	-	-	1.640	15.820	-	-	-
2024	205-99-2	Benzo[b]fluora nthene kg	0.857	-	-	0.857	-	-	-	1.999
2023	205-99-2	Benzo[b]fluora nthene kg	0.881	-	-	0.881	-	-	-	0.933
2021	205-99-2	Benzo[b]fluora nthene kg	0.876	-	-	0.876	-	-	-	0.853
2020	205-99-2	Benzo[b]fluora nthene kg	0.882	-	-	0.882	-	-	-	1.125
2019	205-99-2	Benzo[b]fluora nthene kg	0.846	-	-	0.846	-	-	-	1.177
2018	205-99-2	Benzo[b]fluora nthene kg	0.796	-	-	0.796	-	-	-	0.898
2017	205-99-2	Benzo[b]fluora nthene kg	0.853	-	-	0.853	-	-	-	0.713
2016	205-99-2	Benzo[b]fluora nthene kg	0.862	-	-	0.862	-	-	-	0.934
2015	205-99-2	Benzo[b]fluora nthene kg	0.779	-	-	0.779	-	-	-	0.725
2014	205-99-2	Benzo[b]fluora nthene kg	0.791	-	-	0.791	-	-	-	0.791
2013	205-99-2	Benzo[b]fluora nthene kg	0.834	-	-	0.834	-	-	-	0.950
2012	205-99-2	Benzo[b]fluora nthene kg	0.823	-	-	0.823	-	-	-	0.814
2011	205-99-2	Benzo[b]fluora nthene kg	0.788	-	-	0.788	-	-	-	0.711
2010	205-99-2	Benzo[b]fluora nthene kg	0.831	0.000	0.000	0.831	-	-	-	0.865
2009	205-99-2	Benzo[b]fluora nthene kg	0.786	0.000	0.000	0.786	-	-	-	0.800
2008	205-99-2	Benzo[b]fluora nthene kg	0.769	-	0.000	0.769	-	-	-	0.829
2007	205-99-2	Benzo[b]fluora nthene kg	0.721	-	0.000	0.721	-	-	-	0.943
2006	205-99-2	Benzo[b]fluora nthene kg	2.580	-	0.000	2.580	-	-	-	1.898
2005	205-99-2	Benzo[b]fluora nthene kg	2.535	-	0.000	2.535	-	-	-	1.960
2004	205-99-2	Benzo[b]fluora nthene kg	2.645	-	0.700	3.345	0.700	-	-	-
2003	205-99-2	Benzo[b]fluora nthene kg	2.620	-	-	2.620	2.633	-	-	-
2002	205-99-2	Benzo[b]fluora nthene kg	2.623	-	-	2.623	2.800	-	-	-
2001	205-99-2	Benzo[b]fluora nthene kg	2.610	-	-	2.610	2.590	-	-	-

2000	205-99-2	Benzo[b]fluoranthene	2.600	-	-	2.600	5.080	-	-	-
2024	192-97-2	Benzo[e]pyrene	0.254	-	-	0.254	-	-	-	1.145
2023	192-97-2	Benzo[e]pyrene	0.258	-	-	0.258	-	-	-	-
2021	192-97-2	Benzo[e]pyrene	0.255	-	-	0.255	-	-	-	-
2020	192-97-2	Benzo[e]pyrene	0.259	-	-	0.259	-	-	-	-
2019	192-97-2	Benzo[e]pyrene	0.251	-	-	0.251	-	-	-	-
2018	192-97-2	Benzo[e]pyrene	0.231	-	-	0.231	-	-	-	-
2017	192-97-2	Benzo[e]pyrene	0.247	-	-	0.247	-	-	-	-
2016	192-97-2	Benzo[e]pyrene	0.249	-	-	0.249	-	-	-	-
2015	192-97-2	Benzo[e]pyrene	0.231	-	-	0.231	-	-	-	-
2014	192-97-2	Benzo[e]pyrene	0.228	-	-	0.228	-	-	-	-
2013	192-97-2	Benzo[e]pyrene	0.235	-	-	0.235	-	-	-	-
2012	192-97-2	Benzo[e]pyrene	0.232	-	-	0.232	-	-	-	-
2011	192-97-2	Benzo[e]pyrene	0.226	-	-	0.226	-	-	-	-
2010	192-97-2	Benzo[e]pyrene	0.236	0.000	-	0.236	-	-	-	-
2009	192-97-2	Benzo[e]pyrene	0.228	0.000	-	0.228	-	-	-	-
2008	192-97-2	Benzo[e]pyrene	0.219	-	-	0.219	-	-	-	-
2007	192-97-2	Benzo[e]pyrene	0.229	-	-	0.229	-	-	-	-
2006	192-97-2	Benzo[e]pyrene	-	-	-	0.000	-	-	-	-
2005	192-97-2	Benzo[e]pyrene	0.000	-	-	0.000	0.000	-	-	-
2004	192-97-2	Benzo[e]pyrene	0.000	-	-	0.000	0.000	-	-	-
2003	192-97-2	Benzo[e]pyrene	0.000	-	-	0.000	0.000	-	-	-
2002	192-97-2	Benzo[e]pyrene	0.000	-	-	0.000	0.000	-	-	-
2001	192-97-2	Benzo[e]pyrene	0.000	-	-	0.000	0.000	-	-	-
2000	192-97-2	Benzo[e]pyrene	0.000	-	-	0.000	0.000	-	-	-
2024	191-24-2	Benzo[ghi]perylene	0.388	-	-	0.388	-	-	-	1.677
2023	191-24-2	Benzo[ghi]perylene	0.405	-	-	0.405	-	-	-	0.519
2021	191-24-2	Benzo[ghi]perylene	0.407	-	-	0.407	-	-	-	0.426
2020	191-24-2	Benzo[ghi]perylene	0.403	-	-	0.403	-	-	-	0.404
2019	191-24-2	Benzo[ghi]perylene	0.385	-	-	0.385	-	-	-	0.491
2018	191-24-2	Benzo[ghi]perylene	0.375	-	-	0.375	-	-	-	0.397
2017	191-24-2	Benzo[ghi]perylene	0.402	-	-	0.402	-	-	-	0.262
2016	191-24-2	Benzo[ghi]perylene	0.409	-	-	0.409	-	-	-	0.338
2015	191-24-2	Benzo[ghi]perylene	0.367	-	-	0.367	-	-	-	0.264
2014	191-24-2	Benzo[ghi]perylene	0.370	-	-	0.370	-	-	-	0.283
2013	191-24-2	Benzo[ghi]perylene	0.398	-	-	0.398	-	-	-	0.341
2012	191-24-2	Benzo[ghi]perylene	0.392	-	-	0.392	-	-	-	0.293
2011	191-24-2	Benzo[ghi]perylene	0.369	-	-	0.369	-	-	-	0.257
2010	191-24-2	Benzo[ghi]perylene	0.393	0.000	0.000	0.393	-	-	-	0.313

2010	191-24-2	ylene	kg	0.393	0.000	0.000	0.393	-	-	-	0.313
2009	191-24-2	Benzo[ghi]perylene	kg	0.368	0.000	0.000	0.368	-	-	-	0.289
2008	191-24-2	Benzo[ghi]perylene	kg	0.361	-	0.000	0.361	-	-	-	0.300
2007	191-24-2	Benzo[ghi]perylene	kg	0.303	-	0.000	0.303	-	-	-	0.341
2006	191-24-2	Benzo[ghi]perylene	kg	2.575	-	0.000	2.575	-	-	-	1.142
2005	191-24-2	Benzo[ghi]perylene	kg	2.529	-	0.000	2.529	-	-	-	1.180
2004	191-24-2	Benzo[ghi]perylene	kg	2.639	-	0.400	3.039	0.400	-	-	-
2003	191-24-2	Benzo[ghi]perylene	kg	2.606	-	-	2.606	1.584	-	-	-
2002	191-24-2	Benzo[ghi]perylene	kg	2.604	-	-	2.604	1.680	-	-	-
2001	191-24-2	Benzo[ghi]perylene	kg	2.590	-	-	2.590	1.940	-	-	-
2000	191-24-2	Benzo[ghi]perylene	kg	2.540	-	-	2.540	3.810	-	-	-
2024	205-82-3	Benzo[j]fluoranthene	kg	0.148	-	-	0.148	-	-	-	0.883
2023	205-82-3	Benzo[j]fluoranthene	kg	0.158	-	-	0.158	-	-	-	-
2021	205-82-3	Benzo[j]fluoranthene	kg	0.152	-	-	0.152	-	-	-	-
2020	205-82-3	Benzo[j]fluoranthene	kg	0.160	-	-	0.160	-	-	-	-
2019	205-82-3	Benzo[j]fluoranthene	kg	0.134	-	-	0.134	-	-	-	-
2018	205-82-3	Benzo[j]fluoranthene	kg	0.158	-	-	0.158	-	-	-	-
2017	205-82-3	Benzo[j]fluoranthene	kg	0.160	-	-	0.160	-	-	-	-
2016	205-82-3	Benzo[j]fluoranthene	kg	0.167	-	-	0.167	-	-	-	-
2015	205-82-3	Benzo[j]fluoranthene	kg	0.125	-	-	0.125	-	-	-	-
2014	205-82-3	Benzo[j]fluoranthene	kg	0.166	-	-	0.166	-	-	-	-
2013	205-82-3	Benzo[j]fluoranthene	kg	0.202	-	-	0.202	-	-	-	-
2012	205-82-3	Benzo[j]fluoranthene	kg	0.195	-	-	0.195	-	-	-	-
2011	205-82-3	Benzo[j]fluoranthene	kg	0.171	-	-	0.171	-	-	-	-
2010	205-82-3	Benzo[j]fluoranthene	kg	0.204	0.000	-	0.204	-	-	-	-
2009	205-82-3	Benzo[j]fluoranthene	kg	0.167	0.000	-	0.167	-	-	-	-
2008	205-82-3	Benzo[j]fluoranthene	kg	0.173	-	0.000	0.173	-	-	-	-
2007	205-82-3	Benzo[j]fluoranthene	kg	0.095	-	0.000	0.095	-	-	-	-
2006	205-82-3	Benzo[j]fluoranthene	kg	0.000	-	0.000	0.000	-	-	-	0.381
2005	205-82-3	Benzo[j]fluoranthene	kg	0.000	-	0.000	0.000	-	-	-	0.390
2004	205-82-3	Benzo[j]fluoranthene	kg	0.000	-	0.100	0.100	0.100	-	-	-
2003	205-82-3	Benzo[j]fluoranthene	kg	0.000	-	-	0.000	0.528	-	-	-
2002	205-82-3	Benzo[j]fluoranthene	kg	0.000	-	-	0.000	0.560	-	-	-
2001	205-82-3	Benzo[j]fluoranthene	kg	0.000	-	-	0.000	1.300	-	-	-
2000	205-82-3	Benzo[j]fluoranthene	kg	0.000	-	-	0.000	2.540	-	-	-
2024	207-08-9	Benzo[k]fluoranthene	kg	0.600	-	-	0.600	-	-	-	1.192
2023	207-08-9	Benzo[k]fluoranthene	kg	0.617	-	-	0.617	-	-	-	0.443
2021	207-08-9	Benzo[k]fluoranthene	kg	0.616	-	-	0.616	-	-	-	0.348
2020	207-08-9	Benzo[k]fluoranthene	kg	0.616	-	-	0.616	-	-	-	0.272

2019	207-08-9	Benzo[k]fluoranthene	0.597	-	-	0.597	-	-	-	0.370
2018	207-08-9	Benzo[k]fluoranthene	0.553	-	-	0.553	-	-	-	0.301
2017	207-08-9	Benzo[k]fluoranthene	0.597	-	-	0.597	-	-	-	0.174
2016	207-08-9	Benzo[k]fluoranthene	0.602	-	-	0.602	-	-	-	0.228
2015	207-08-9	Benzo[k]fluoranthene	0.549	-	-	0.549	-	-	-	0.177
2014	207-08-9	Benzo[k]fluoranthene	0.547	-	-	0.547	-	-	-	0.194
2013	207-08-9	Benzo[k]fluoranthene	0.571	-	-	0.571	-	-	-	0.231
2012	207-08-9	Benzo[k]fluoranthene	0.565	-	-	0.565	-	-	-	0.200
2011	207-08-9	Benzo[k]fluoranthene	0.544	-	-	0.544	-	-	-	0.174
2010	207-08-9	Benzo[k]fluoranthene	0.566	0.000	0.000	0.566	-	-	-	0.211
2009	207-08-9	Benzo[k]fluoranthene	0.542	0.000	0.000	0.542	-	-	-	0.195
2008	207-08-9	Benzo[k]fluoranthene	0.530	-	0.000	0.530	-	-	-	0.203
2007	207-08-9	Benzo[k]fluoranthene	0.505	-	0.000	0.505	-	-	-	0.230
2006	207-08-9	Benzo[k]fluoranthene	2.517	-	0.000	2.517	-	-	-	0.381
2005	207-08-9	Benzo[k]fluoranthene	2.471	-	0.000	2.471	-	-	-	0.390
2004	207-08-9	Benzo[k]fluoranthene	2.578	-	0.100	2.678	0.100	-	-	-
2003	207-08-9	Benzo[k]fluoranthene	2.545	-	-	2.545	0.528	-	-	-
2002	207-08-9	Benzo[k]fluoranthene	2.545	-	-	2.545	0.560	-	-	-
2001	207-08-9	Benzo[k]fluoranthene	2.530	-	-	2.530	1.300	-	-	-
2000	207-08-9	Benzo[k]fluoranthene	2.480	-	-	2.480	2.540	-	-	-
2024	NA - 03	Cadmium (and its compounds)	4.011	27.183	-	31.193	-	-	0.034	43.908
2023	NA - 03	Cadmium (and its compounds)	4.178	24.394	-	28.572	-	-	0.438	51.931
2021	NA - 03	Cadmium (and its compounds)	4.066	32.637	-	36.703	-	-	-	54.196
2020	NA - 03	Cadmium (and its compounds)	4.079	27.918	-	31.997	-	-	-	129.635
2019	NA - 03	Cadmium (and its compounds)	3.994	37.115	-	41.109	-	-	-	70.491
2018	NA - 03	Cadmium (and its compounds)	3.773	25.997	-	29.770	-	-	-	74.791
2017	NA - 03	Cadmium (and its compounds)	4.022	46.807	-	50.829	-	-	-	73.291
2016	NA - 03	Cadmium (and its compounds)	4.053	45.695	-	49.748	-	-	-	82.839
2015	NA - 03	Cadmium (and its compounds)	3.917	28.415	-	32.332	-	-	-	66.335
2014	NA - 03	Cadmium (and its compounds)	3.775	37.954	-	41.729	-	-	-	61.312
2013	NA - 03	Cadmium (and its compounds)	3.910	49.089	-	52.999	-	-	-	78.280
2012	NA - 03	Cadmium (and its compounds)	3.858	40.228	-	44.086	-	-	-	123.169
2011	NA - 03	Cadmium (and its compounds)	3.757	58.698	-	62.455	-	-	-	97.249
2010	NA - 03	Cadmium (and its compounds)	3.957	46.625	-	50.582	14.629	-	-	66.483
2009	NA - 03	Cadmium (and its compounds)	3.971	42.219	-	46.190	10.075	-	-	40.562
2008	NA - 03	Cadmium (and its compounds)	3.635	29.344	-	32.979	9.574	-	-	46.870
2007	NA - 03	Cadmium (and its compounds)	4.658	33.585	-	38.243	10.237	-	-	65.830
2006	NA - 03	Cadmium (and its compounds)	8.085	44.060	-	52.145	9.851	-	-	69.523
2005	NA - 03	Cadmium (and its compounds)	7.980	67.553	-	75.533	9.880	-	-	67.740

2005	NA - 03	its compounds)kg		7.980	67.553	-	75.533	9.880	-	-	67.740
2004	NA - 03	Cadmium (and kg its compounds)		8.273	11.849	-	20.122	52.100	-	-	35.730
2003	NA - 03	Cadmium (and kg its compounds)		8.210	11.170	-	19.380	83.790	-	-	-
2002	NA - 03	Cadmium (and kg its compounds)		8.360	10.940	-	19.300	45.360	-	-	-
2024	630-08-0	Carbon tonnes monoxide		2441.444	-	-	2441.444	-	-	-	-
2023	630-08-0	Carbon tonnes monoxide		2723.776	-	-	2723.776	-	-	-	-
2021	630-08-0	Carbon tonnes monoxide		2158.477	-	-	2158.477	-	-	-	-
2020	630-08-0	Carbon tonnes monoxide		2297.556	-	-	2297.556	-	-	-	-
2019	630-08-0	Carbon tonnes monoxide		2215.149	-	-	2215.149	-	-	-	-
2018	630-08-0	Carbon tonnes monoxide		2001.820	-	-	2001.820	-	-	-	-
2017	630-08-0	Carbon tonnes monoxide		2208.390	-	-	2208.390	-	-	-	-
2016	630-08-0	Carbon tonnes monoxide		2119.474	-	-	2119.474	-	-	-	-
2015	630-08-0	Carbon tonnes monoxide		2052.946	-	-	2052.946	-	-	-	-
2014	630-08-0	Carbon tonnes monoxide		2126.324	-	-	2126.324	-	-	-	-
2013	630-08-0	Carbon tonnes monoxide		2109.793	-	-	2109.793	-	-	-	-
2012	630-08-0	Carbon tonnes monoxide		2085.064	-	-	2085.064	-	-	-	-
2011	630-08-0	Carbon tonnes monoxide		2038.533	-	-	2038.533	-	-	-	-
2010	630-08-0	Carbon tonnes monoxide		2132.957	-	-	2132.957	-	-	-	-
2009	630-08-0	Carbon tonnes monoxide		1975.028	-	-	1975.028	-	-	-	-
2008	630-08-0	Carbon tonnes monoxide		1505.795	-	-	1505.795	-	-	-	-
2007	630-08-0	Carbon tonnes monoxide		1666.861	-	-	1666.861	-	-	-	-
2006	630-08-0	Carbon tonnes monoxide		1735.991	-	-	1735.991	-	-	-	-
2005	630-08-0	Carbon tonnes monoxide		1658.332	-	-	1658.332	-	-	-	-
2004	630-08-0	Carbon tonnes monoxide		1699.176	-	-	1699.176	-	-	-	-
2003	630-08-0	Carbon tonnes monoxide		1677.877	-	-	1677.877	-	-	-	-
2002	630-08-0	Carbon tonnes monoxide		1677.877	-	-	1677.877	-	-	-	-
2010	7782-50-5	Chlorine tonnes		2.217	-	-	2.217	-	-	-	-
2009	7782-50-5	Chlorine tonnes		2.199	-	-	2.199	-	-	-	-
2008	7782-50-5	Chlorine tonnes		3.356	-	-	3.356	-	-	-	-
2007	7782-50-5	Chlorine tonnes		3.542	-	-	3.542	-	-	-	-
2006	7782-50-5	Chlorine tonnes		2.588	-	-	2.588	-	-	-	-
2005	7782-50-5	Chlorine tonnes		14.696	-	-	14.696	-	-	-	-
2004	7782-50-5	Chlorine tonnes		53.915	-	-	53.915	-	-	-	-
2003	7782-50-5	Chlorine tonnes		53.239	-	-	53.239	-	-	-	-
2002	7782-50-5	Chlorine tonnes		63.023	-	-	63.023	-	-	-	-
2001	7782-50-5	Chlorine tonnes		57.160	-	-	57.160	-	-	-	-
2000	7782-50-5	Chlorine tonnes		46.690	-	-	46.690	-	-	-	-
1999	7782-50-5	Chlorine tonnes		39.090	-	-	39.090	-	-	-	-
1997	7782-50-5	Chlorine tonnes		0.823	-	-	0.823	-	-	-	-
1996	7782-50-5	Chlorine tonnes		1.627	-	-	1.627	-	-	-	-
1995	7782-50-5	Chlorine tonnes		19.292	-	-	19.292	-	-	-	-
1994	7782-50-5	Chlorine tonnes		40.121	-	-	40.121	-	-	-	-
1993	7782-50-5	Chlorine tonnes		0.000	-	-	0.000	-	-	-	-
2024	10049-04-4	Chlorine tonnes dioxide		8.568	-	-	8.568	-	-	-	-
2023	10049-04-4	Chlorine tonnes dioxide		8.568	-	-	8.568	-	-	-	-
2021	10049-04-4	Chlorine tonnes dioxide		7.067	-	-	7.067	-	-	-	-
2020	10049-04-4	Chlorine tonnes dioxide		7.247	-	-	7.247	-	-	-	-
2019	10049-04-4	Chlorine tonnes		7.077	-	-	7.077	-	-	-	-

2019	10049-04-4	dioxide	tonnes	7.077	-	-	7.077	-	-	-	-
2018	10049-04-4	Chlorine dioxide	tonnes	6.559	-	-	6.559	-	-	-	-
2017	10049-04-4	Chlorine dioxide	tonnes	9.381	-	-	9.381	-	-	-	-
2016	10049-04-4	Chlorine dioxide	tonnes	9.662	-	-	9.662	-	-	-	-
2015	10049-04-4	Chlorine dioxide	tonnes	9.448	-	-	9.448	-	-	-	-
2014	10049-04-4	Chlorine dioxide	tonnes	9.395	-	-	9.395	-	-	-	-
2013	10049-04-4	Chlorine dioxide	tonnes	9.242	-	-	9.242	-	-	-	-
2012	10049-04-4	Chlorine dioxide	tonnes	9.037	-	-	9.037	-	-	-	-
2011	10049-04-4	Chlorine dioxide	tonnes	8.999	-	-	8.999	-	-	-	-
2010	10049-04-4	Chlorine dioxide	tonnes	9.216	-	-	9.216	-	-	-	-
2009	10049-04-4	Chlorine dioxide	tonnes	9.139	-	-	9.139	-	-	-	-
2008	10049-04-4	Chlorine dioxide	tonnes	5.472	-	-	5.472	-	-	-	-
2007	10049-04-4	Chlorine dioxide	tonnes	5.751	-	-	5.751	-	-	-	-
2006	10049-04-4	Chlorine dioxide	tonnes	1.582	-	-	1.582	-	-	-	-
2005	10049-04-4	Chlorine dioxide	tonnes	4.357	-	-	4.357	-	-	-	-
2004	10049-04-4	Chlorine dioxide	tonnes	25.525	-	-	25.525	-	-	-	-
2003	10049-04-4	Chlorine dioxide	tonnes	25.205	-	-	25.205	-	-	-	-
2002	10049-04-4	Chlorine dioxide	tonnes	37.286	-	-	37.286	-	-	-	-
2001	10049-04-4	Chlorine dioxide	tonnes	63.470	-	-	63.470	-	-	-	-
2000	10049-04-4	Chlorine dioxide	tonnes	62.300	-	-	62.300	-	-	-	-
1999	10049-04-4	Chlorine dioxide	tonnes	62.570	-	-	62.570	-	-	-	-
1998	10049-04-4	Chlorine dioxide	tonnes	74.931	-	-	74.931	-	-	-	-
1997	10049-04-4	Chlorine dioxide	tonnes	72.966	-	-	72.966	-	-	-	-
1996	10049-04-4	Chlorine dioxide	tonnes	68.998	-	-	68.998	-	-	-	-
1995	10049-04-4	Chlorine dioxide	tonnes	70.714	-	-	70.714	-	-	-	-
1994	10049-04-4	Chlorine dioxide	tonnes	63.065	-	-	63.065	-	-	-	-
1993	10049-04-4	Chlorine dioxide	tonnes	4.820	1.140	-	5.960	-	-	-	-
2024	218-01-9	Chrysene	kg	7.854	-	-	7.854	-	-	-	1.675
2023	218-01-9	Chrysene	kg	7.991	-	-	7.991	-	-	-	0.106
2021	218-01-9	Chrysene	kg	7.904	-	-	7.904	-	-	-	0.109
2020	218-01-9	Chrysene	kg	8.005	-	-	8.005	-	-	-	0.182
2019	218-01-9	Chrysene	kg	7.766	-	-	7.766	-	-	-	0.178
2018	218-01-9	Chrysene	kg	7.133	-	-	7.133	-	-	-	0.130
2017	218-01-9	Chrysene	kg	7.646	-	-	7.646	-	-	-	0.120
2016	218-01-9	Chrysene	kg	7.708	-	-	7.708	-	-	-	0.152
2015	218-01-9	Chrysene	kg	7.137	-	-	7.137	-	-	-	0.121
2014	218-01-9	Chrysene	kg	7.036	-	-	7.036	-	-	-	0.132
2013	218-01-9	Chrysene	kg	7.255	-	-	7.255	-	-	-	0.152
2012	218-01-9	Chrysene	kg	7.168	-	-	7.168	-	-	-	0.134
2011	218-01-9	Chrysene	kg	6.987	-	-	6.987	-	-	-	0.116
2010	218-01-9	Chrysene	kg	7.271	0.000	0.000	7.271	-	-	-	0.141
2009	218-01-9	Chrysene	kg	7.036	0.000	0.000	7.036	-	-	-	0.130
2008	218-01-9	Chrysene	kg	6.753	-	0.000	6.753	-	-	-	0.135
2007	218-01-9	Chrysene	kg	7.068	-	0.000	7.068	-	-	-	0.154
2006	218-01-9	Chrysene	kg	9.157	-	0.000	9.157	-	-	-	0.662
2005	218-01-9	Chrysene	kg	8.972	-	0.000	8.972	-	-	-	0.680
2004	218-01-9	Chrysene	kg	9.403	-	0.300	9.703	0.300	-	-	-
2003	218-01-9	Chrysene	kg	9.296	-	-	9.296	0.900	-	-	-
2002	218-01-9	Chrysene	kg	9.296	-	-	9.296	0.980	-	-	-
2001	218-01-9	Chrysene	kg	9.250	-	-	9.250	1.050	-	-	-
2000	218-01-9	Chrysene	kg	9.130	-	-	9.130	2.060	-	-	-

2024	NA - 05	Cobalt (and its kg compounds)		2.906	-	-	2.906	-	-	1.754	78.867
2023	NA - 05	Cobalt (and its kg compounds)		2.912	-	-	2.912	-	-	3.307	66.988
2021	NA - 05	Cobalt (and its kg compounds)		3.733	2.678	-	6.411	-	-	-	61.035
2020	NA - 05	Cobalt (and its kg compounds)		3.114	0.000	-	3.114	-	-	-	83.780
2019	NA - 05	Cobalt (and its kg compounds)		3.921	2.719	-	6.640	-	-	-	82.520
2018	NA - 05	Cobalt (and its kg compounds)		3.055	2.231	-	5.286	-	-	0.575	64.655
2017	NA - 05	Cobalt (and its kg compounds)		3.511	0.000	-	3.511	-	-	-	50.222
2016	NA - 05	Cobalt (and its kg compounds)		2.934	3.292	-	6.226	-	-	-	61.263
2010	1319-77-3	Cresol (all isomers, and their salts)	tonnes	8.286	1.520	-	9.806	-	-	-	-
2009	1319-77-3	Cresol (all isomers, and their salts)	tonnes	8.074	1.407	-	9.481	-	-	-	-
2008	1319-77-3	Cresol (all isomers, and their salts)	tonnes	7.669	1.366	-	9.035	-	-	-	-
2007	1319-77-3	Cresol (all isomers, and their salts)	tonnes	8.117	1.600	-	9.717	-	-	-	-
2006	1319-77-3	Cresol (all isomers, and their salts)	tonnes	14.029	1.622	-	15.651	-	-	-	-
2000	1319-77-3	Cresol (mixed isomers, and their salts)	tonnes	11.930	1.360	-	13.290	-	-	-	-
1999	1319-77-3	Cresol (mixed isomers, and their salts)	tonnes	11.700	1.320	-	13.020	-	-	-	-
2024	53-70-3	Dibenz[a,h]anthracene	kg	0.284	-	-	0.284	-	-	-	0.821
2023	53-70-3	Dibenz[a,h]anthracene	kg	0.294	-	-	0.294	-	-	-	0.514
2021	53-70-3	Dibenz[a,h]anthracene	kg	0.298	-	-	0.298	-	-	-	0.422
2020	53-70-3	Dibenz[a,h]anthracene	kg	0.293	-	-	0.293	-	-	-	0.395
2019	53-70-3	Dibenz[a,h]anthracene	kg	0.287	-	-	0.287	-	-	-	0.488
2018	53-70-3	Dibenz[a,h]anthracene	kg	0.263	-	-	0.263	-	-	-	0.387
2017	53-70-3	Dibenz[a,h]anthracene	kg	0.287	-	-	0.287	-	-	-	0.254
2016	53-70-3	Dibenz[a,h]anthracene	kg	0.288	-	-	0.288	-	-	-	0.328
2015	53-70-3	Dibenz[a,h]anthracene	kg	0.264	-	-	0.264	-	-	-	0.258
2014	53-70-3	Dibenz[a,h]anthracene	kg	0.259	-	-	0.259	-	-	-	0.278
2013	53-70-3	Dibenz[a,h]anthracene	kg	0.269	-	-	0.269	-	-	-	0.335
2012	53-70-3	Dibenz[a,h]anthracene	kg	0.267	-	-	0.267	-	-	-	0.289
2011	53-70-3	Dibenz[a,h]anthracene	kg	0.257	-	-	0.257	-	-	-	0.252
2010	53-70-3	Dibenz[a,h]anthracene	kg	0.263	0.000	0.000	0.263	-	-	-	0.307
2009	53-70-3	Dibenz[a,h]anthracene	kg	0.257	0.000	0.000	0.257	-	-	-	0.284
2008	53-70-3	Dibenz[a,h]anthracene	kg	0.255	-	0.000	0.255	-	-	-	0.294
2007	53-70-3	Dibenz[a,h]anthracene	kg	0.229	-	0.000	0.229	-	-	-	0.335
2006	53-70-3	Dibenz[a,h]anthracene	kg	2.206	-	0.000	2.206	-	-	-	0.614
2005	53-70-3	Dibenz[a,h]anthracene	kg	2.168	-	0.000	2.168	-	-	-	0.630
2004	53-70-3	Dibenz[a,h]anthracene	kg	2.259	-	0.200	2.459	0.200	-	-	-

2003	53-70-3	Dibenz[a,h]ant kg hracene	2.231	-	-	2.231	0.852	-	-	-
2002	53-70-3	Dibenz[a,h]ant kg hracene	2.230	-	-	2.230	0.910	-	-	-
2001	53-70-3	Dibenz[a,h]ant kg hracene	2.220	-	-	2.220	1.490	-	-	-
2000	53-70-3	Dibenz[a,h]ant kg hracene	2.180	-	-	2.180	2.930	-	-	-
2024	224-42-0	Dibenz[a,j]acri kg dine	-	-	-	0.000	-	-	-	-
2023	224-42-0	Dibenz[a,j]acri kg dine	-	-	-	0.000	-	-	-	-
2021	224-42-0	Dibenz[a,j]acri kg dine	-	0.000	-	0.000	-	-	-	-
2020	224-42-0	Dibenz[a,j]acri kg dine	-	-	-	0.000	-	-	-	-
2019	224-42-0	Dibenz[a,j]acri kg dine	-	-	-	0.000	-	-	-	-
2018	224-42-0	Dibenz[a,j]acri kg dine	-	-	-	0.000	-	-	-	-
2017	224-42-0	Dibenz[a,j]acri kg dine	-	-	-	0.000	-	-	-	-
2016	224-42-0	Dibenz[a,j]acri kg dine	-	-	-	0.000	-	-	-	-
2015	224-42-0	Dibenz[a,j]acri kg dine	-	-	-	0.000	-	-	-	-
2014	224-42-0	Dibenz[a,j]acri kg dine	-	-	-	0.000	-	-	-	-
2013	224-42-0	Dibenz[a,j]acri kg dine	-	-	-	0.000	-	-	-	-
2012	224-42-0	Dibenz[a,j]acri kg dine	-	-	-	0.000	-	-	-	-
2011	224-42-0	Dibenz[a,j]acri kg dine	-	-	-	0.000	-	-	-	-
2010	224-42-0	Dibenz[a,j]acri kg dine	-	-	-	0.000	-	-	-	-
2009	224-42-0	Dibenz[a,j]acri kg dine	-	-	-	0.000	-	-	-	-
2008	224-42-0	Dibenz[a,j]acri kg dine	-	-	-	0.000	-	-	-	-
2007	224-42-0	Dibenz[a,j]acri kg dine	-	-	-	0.000	-	-	-	-
2006	224-42-0	Dibenz[a,j]acri kg dine	-	-	-	0.000	-	-	-	-
2005	224-42-0	Dibenz[a,j]acri kg dine	-	-	-	0.000	-	-	-	-
2004	224-42-0	Dibenz[a,j]acri kg dine	-	-	-	0.000	-	-	-	-
2003	224-42-0	Dibenz[a,j]acri kg dine	0.000	-	-	0.000	0.000	-	-	-
2002	224-42-0	Dibenz[a,j]acri kg dine	0.000	-	-	0.000	0.000	-	-	-
2001	224-42-0	Dibenz[a,j]acri kg dine	0.000	-	-	0.000	0.000	-	-	-
2000	224-42-0	Dibenz[a,j]acri kg dine	0.000	-	-	0.000	0.000	-	-	-
2024	189-55-9	Dibenzo[a,i]py kg rene	-	-	-	0.000	-	-	-	-
2023	189-55-9	Dibenzo[a,i]py kg rene	-	-	-	0.000	-	-	-	-
2021	189-55-9	Dibenzo[a,i]py kg rene	-	0.000	-	0.000	-	-	-	-
2020	189-55-9	Dibenzo[a,i]py kg rene	-	-	-	0.000	-	-	-	-
2019	189-55-9	Dibenzo[a,i]py kg rene	-	-	-	0.000	-	-	-	-
2018	189-55-9	Dibenzo[a,i]py kg rene	-	-	-	0.000	-	-	-	-
2017	189-55-9	Dibenzo[a,i]py kg rene	-	-	-	0.000	-	-	-	-
2016	189-55-9	Dibenzo[a,i]py kg rene	-	-	-	0.000	-	-	-	-
2015	189-55-9	Dibenzo[a,i]py kg rene	-	-	-	0.000	-	-	-	-
2014	189-55-9	Dibenzo[a,i]py kg rene	-	-	-	0.000	-	-	-	-
2013	189-55-9	Dibenzo[a,i]py kg	-	-	-	0.000	-	-	-	-

2013	189-55-9	rene	kg	-	-	-	0.000	-	-	-	-
2012	189-55-9	Dibenzo[a,i]pyrene	kg	-	-	-	0.000	-	-	-	-
2011	189-55-9	Dibenzo[a,i]pyrene	kg	-	-	-	0.000	-	-	-	-
2010	189-55-9	Dibenzo[a,i]pyrene	kg	-	-	-	0.000	-	-	-	-
2009	189-55-9	Dibenzo[a,i]pyrene	kg	-	-	-	0.000	-	-	-	-
2008	189-55-9	Dibenzo[a,i]pyrene	kg	-	-	-	0.000	-	-	-	-
2007	189-55-9	Dibenzo[a,i]pyrene	kg	-	-	-	0.000	-	-	-	-
2006	189-55-9	Dibenzo[a,i]pyrene	kg	-	-	-	0.000	-	-	-	-
2005	189-55-9	Dibenzo[a,i]pyrene	kg	-	-	-	0.000	-	-	-	-
2004	189-55-9	Dibenzo[a,i]pyrene	kg	-	-	-	0.000	-	-	-	-
2003	189-55-9	Dibenzo[a,i]pyrene	kg	0.000	-	-	0.000	0.000	-	-	-
2002	189-55-9	Dibenzo[a,i]pyrene	kg	0.000	-	-	0.000	0.000	-	-	-
2001	189-55-9	Dibenzo[a,i]pyrene	kg	0.000	-	-	0.000	0.000	-	-	-
2000	189-55-9	Dibenzo[a,i]pyrene	kg	0.000	-	-	0.000	0.000	-	-	-
2024	NA - D/F	Dioxins and furans - total	g TEQ	0.009	-	-	0.009	-	-	-	-
2023	NA - D/F	Dioxins and furans - total	g TEQ	0.009	-	-	0.009	-	-	-	-
2021	NA - D/F	Dioxins and furans - total	g TEQ	0.009	-	-	0.009	-	-	-	-
2020	NA - D/F	Dioxins and furans - total	g TEQ	0.009	-	-	0.009	-	-	-	-
2019	NA - D/F	Dioxins and furans - total	g TEQ	0.009	-	-	0.009	-	-	-	-
2018	NA - D/F	Dioxins and furans - total	g TEQ	0.008	-	-	0.008	-	-	-	-
2017	NA - D/F	Dioxins and furans - total	g TEQ	0.008	-	-	0.008	-	-	-	-
2016	NA - D/F	Dioxins and furans - total	g TEQ	0.008	-	-	0.008	-	-	-	-
2015	NA - D/F	Dioxins and furans - total	g TEQ	0.008	-	-	0.008	-	-	-	-
2014	NA - D/F	Dioxins and furans - total	g TEQ	0.008	-	-	0.008	-	-	-	-
2013	NA - D/F	Dioxins and furans - total	g TEQ	0.008	-	-	0.008	-	-	-	-
2012	NA - D/F	Dioxins and furans - total	g TEQ	0.008	-	-	0.008	-	-	-	-
2011	NA - D/F	Dioxins and furans - total	g TEQ	0.008	-	-	0.008	-	-	-	-
2010	NA - D/F	Dioxins and furans - total	g TEQ	0.008	-	-	0.008	-	-	-	-
2009	NA - D/F	Dioxins and furans - total	g TEQ	-	-	-	0.000	-	-	-	0.016
2008	NA - D/F	Dioxins and furans - total	g TEQ	-	-	-	0.000	-	-	-	0.015
2007	NA - D/F	Dioxins and furans - total	g TEQ	-	0.001	-	0.001	-	-	-	0.012
2006	NA - D/F	Dioxins and furans - total	g TEQ	0.009	0.008	-	0.017	-	-	-	-
2005	NA - D/F	Dioxins and furans - total	g TEQ	0.009	0.019	-	0.028	-	-	-	-
2004	NA - D/F	Dioxins and furans - total	g TEQ	0.009	-	-	0.009	-	-	-	-
2003	NA - D/F	Dioxins and furans - total	g TEQ	0.009	-	-	0.009	-	-	-	-
2002	NA - D/F	Dioxins and furans - total	g TEQ	0.009	-	-	0.009	-	-	-	-
2001	NA - D/F	Dioxins and furans - total	g TEQ	0.009	-	-	0.009	-	-	-	-
2000	NA - D/F	Dioxins and furans - total	g TEQ	0.008	-	-	0.008	-	-	-	-
2024	206-44-0	Fluoranthene	kg	34.659	-	-	34.659	-	-	-	4.574
2023	206-44-0	Fluoranthene	kg	35.318	-	-	35.318	-	-	-	0.815

2021	206-44-0	Fluoranthene	kg	34.881	-	-	34.881	-	-	-	0.775
2020	206-44-0	Fluoranthene	kg	35.406	-	-	35.406	-	-	-	1.120
2019	206-44-0	Fluoranthene	kg	34.141	-	-	34.141	-	-	-	1.126
2018	206-44-0	Fluoranthene	kg	31.685	-	-	31.685	-	-	-	0.853
2017	206-44-0	Fluoranthene	kg	33.857	-	-	33.857	-	-	-	0.711
2016	206-44-0	Fluoranthene	kg	34.193	-	-	34.193	-	-	-	0.922
2015	206-44-0	Fluoranthene	kg	31.394	-	-	31.394	-	-	-	0.720
2014	206-44-0	Fluoranthene	kg	31.347	-	-	31.347	-	-	-	0.782
2013	206-44-0	Fluoranthene	kg	32.595	-	-	32.595	-	-	-	0.936
2012	206-44-0	Fluoranthene	kg	32.155	-	-	32.155	-	-	-	0.812
2011	206-44-0	Fluoranthene	kg	31.178	-	-	31.178	-	-	-	0.706
2010	206-44-0	Fluoranthene	kg	32.703	0.000	0.000	32.703	-	-	-	0.860
2009	206-44-0	Fluoranthene	kg	31.351	0.000	0.000	31.351	-	-	-	0.794
2008	206-44-0	Fluoranthene	kg	30.186	0.000	0.000	30.186	-	-	-	0.824
2007	206-44-0	Fluoranthene	kg	30.895	1.501	0.000	32.396	-	-	-	0.937
2006	206-44-0	Fluoranthene	kg	31.245	1.522	0.000	32.767	-	-	-	4.735
2005	206-44-0	Fluoranthene	kg	30.601	1.510	0.000	32.111	-	-	-	4.880
2004	206-44-0	Fluoranthene	kg	32.116	1.501	1.800	35.417	1.800	-	-	-
2003	206-44-0	Fluoranthene	kg	31.799	1.415	-	33.214	6.568	-	-	-
2002	206-44-0	Fluoranthene	kg	31.828	1.386	-	33.214	6.990	-	-	-
2001	206-44-0	Fluoranthene	kg	31.680	1.350	-	33.030	4.800	-	-	-
2000	206-44-0	Fluoranthene	kg	31.570	1.280	-	32.850	9.430	-	-	-
2024	86-73-7	Fluorene	kg	3.608	-	-	3.608	-	-	-	0.507
2023	86-73-7	Fluorene	kg	3.823	-	-	3.823	-	-	-	-
2021	86-73-7	Fluorene	kg	3.703	-	-	3.703	-	-	-	-
2020	86-73-7	Fluorene	kg	3.884	-	-	3.884	-	-	-	-
2019	86-73-7	Fluorene	kg	3.300	-	-	3.300	-	-	-	-
2018	86-73-7	Fluorene	kg	3.785	-	-	3.785	-	-	-	-
2017	86-73-7	Fluorene	kg	3.844	-	-	3.844	-	-	-	-
2016	86-73-7	Fluorene	kg	4.004	-	-	4.004	-	-	-	-
2015	86-73-7	Fluorene	kg	3.086	-	-	3.086	-	-	-	-
2014	86-73-7	Fluorene	kg	3.955	-	-	3.955	-	-	-	-
2013	86-73-7	Fluorene	kg	4.716	-	-	4.716	-	-	-	-
2012	86-73-7	Fluorene	kg	4.561	-	-	4.561	-	-	-	-
2011	86-73-7	Fluorene	kg	4.040	-	-	4.040	-	-	-	-
2010	86-73-7	Fluorene	kg	4.776	-	-	4.776	-	-	-	-
2009	86-73-7	Fluorene	kg	3.968	0.000	-	3.968	-	-	-	-
2008	86-73-7	Fluorene	kg	4.080	0.000	-	4.080	-	-	-	-
2007	86-73-7	Fluorene	kg	2.444	0.000	-	2.444	-	-	-	-
2006	86-73-7	Fluorene	kg	-	-	-	0.000	-	-	-	-
2024	50-00-0	Formaldehyde	tonnes	3.326	2.778	-	6.104	-	-	-	-
2023	50-00-0	Formaldehyde	tonnes	3.377	2.604	-	5.980	-	-	-	-
2021	50-00-0	Formaldehyde	tonnes	3.339	2.583	-	5.922	-	-	-	-
2020	50-00-0	Formaldehyde	tonnes	3.386	1.717	-	5.103	-	-	-	-
2019	50-00-0	Formaldehyde	tonnes	3.284	2.266	-	5.550	-	-	-	-
2018	50-00-0	Formaldehyde	tonnes	3.028	3.053	-	6.081	-	-	-	-
2017	50-00-0	Formaldehyde	tonnes	3.240	2.915	-	6.155	-	-	-	-
2016	50-00-0	Formaldehyde	tonnes	3.262	3.957	-	7.219	-	-	-	-
2015	50-00-0	Formaldehyde	tonnes	3.081	3.579	-	6.660	-	-	-	-
2014	50-00-0	Formaldehyde	tonnes	3.046	5.964	-	9.010	-	-	-	-
2013	50-00-0	Formaldehyde	tonnes	3.129	3.691	-	6.820	-	-	-	-
2012	50-00-0	Formaldehyde	tonnes	3.089	3.225	-	6.314	-	-	-	-
2011	50-00-0	Formaldehyde	tonnes	3.025	4.540	-	7.565	-	-	-	-
2010	50-00-0	Formaldehyde	tonnes	3.131	6.053	-	9.184	-	-	-	-
2009	50-00-0	Formaldehyde	tonnes	3.035	10.772	-	13.807	-	-	-	-
2008	50-00-0	Formaldehyde	tonnes	2.912	7.195	-	10.107	-	-	-	-
2007	50-00-0	Formaldehyde	tonnes	3.038	4.873	-	7.911	-	-	-	-
2006	50-00-0	Formaldehyde	tonnes	5.663	15.021	-	20.684	-	-	-	-
2005	50-00-0	Formaldehyde	tonnes	5.562	20.663	-	26.225	-	-	-	-
2004	50-00-0	Formaldehyde	tonnes	5.749	17.379	-	23.128	-	-	-	-
2003	50-00-0	Formaldehyde	tonnes	5.655	16.390	-	22.045	-	-	-	-
2002	50-00-0	Formaldehyde	tonnes	5.758	16.051	-	21.809	-	-	-	-
2001	50-00-0	Formaldehyde	tonnes	5.620	15.680	-	21.300	-	-	-	-
2000	50-00-0	Formaldehyde	tonnes	5.510	14.790	-	20.300	-	-	-	-
1999	50-00-0	Formaldehyde	tonnes	4.950	14.280	-	19.230	-	-	-	-
2024	118-74-1	Hexachloroben zene	grams	-	-	-	0.000	-	-	-	-
2023	118-74-1	Hexachloroben zene	grams	-	-	-	0.000	-	-	-	-
2021	118-74-1	Hexachloroben zene	grams	-	-	-	0.000	-	-	-	-
2020	118-74-1	Hexachloroben zene	grams	-	-	-	0.000	-	-	-	-
2019	118-74-1	Hexachloroben zene	grams	0.000	-	-	0.000	-	-	-	-
2018	118-74-1	Hexachloroben zene	grams	0.000	-	-	0.000	-	-	-	-

2017	118-74-1	Hexachloroben zene	grams	0.000	-	-	0.000	-	-	-	-
2016	118-74-1	Hexachloroben zene	grams	0.000	-	-	0.000	-	-	-	-
2015	118-74-1	Hexachloroben zene	grams	0.000	-	-	0.000	-	-	-	-
2014	118-74-1	Hexachloroben zene	grams	0.000	-	-	0.000	-	-	-	-
2013	118-74-1	Hexachloroben zene	grams	0.000	-	-	0.000	-	-	-	-
2012	118-74-1	Hexachloroben zene	grams	0.000	-	-	0.000	-	-	-	-
2011	118-74-1	Hexachloroben zene	grams	0.000	-	-	0.000	-	-	-	-
2010	118-74-1	Hexachloroben zene	grams	0.000	-	-	0.000	-	-	-	-
2009	118-74-1	Hexachloroben zene	grams	-	-	-	0.000	-	-	-	-
2008	118-74-1	Hexachloroben zene	grams	-	-	-	0.000	-	-	-	-
2007	118-74-1	Hexachloroben zene	grams	-	-	-	0.000	-	-	-	-
2006	118-74-1	Hexachloroben zene	grams	-	-	-	0.000	-	-	-	-
2005	118-74-1	Hexachloroben zene	grams	-	-	-	0.000	-	-	-	-
2004	118-74-1	Hexachloroben zene	grams	-	-	-	0.000	-	-	-	-
2003	118-74-1	Hexachloroben zene	grams	-	-	-	0.000	-	-	-	-
2002	118-74-1	Hexachloroben zene	grams	-	-	-	0.000	-	-	-	-
2001	118-74-1	Hexachloroben zene	grams	-	-	-	0.000	-	-	-	-
2000	118-74-1	Hexachloroben zene	grams	-	-	-	0.000	-	-	-	-
2024	NA - 19	Hexavalent chromium (and its compounds)	kg	6.642	31.181	-	37.823	-	-	-	164.299
2023	NA - 19	Hexavalent chromium (and its compounds)	kg	6.797	31.269	-	38.066	-	-	-	143.850
2021	NA - 19	Hexavalent chromium (and its compounds)	kg	6.766	31.377	-	38.143	-	-	-	142.357
2020	NA - 19	Hexavalent chromium (and its compounds)	kg	6.833	30.428	-	37.261	-	-	-	173.096
2019	NA - 19	Hexavalent chromium (and its compounds)	kg	6.612	28.502	-	35.114	-	-	-	170.568
2018	NA - 19	Hexavalent chromium (and its compounds)	kg	6.162	25.339	-	31.501	-	-	0.845	148.771
2017	NA - 19	Hexavalent chromium (and its compounds)	kg	6.600	29.624	-	36.224	-	-	-	128.757
2016	NA - 19	Hexavalent chromium (and its compounds)	kg	6.643	30.604	-	37.247	-	-	-	158.471
2015	NA - 19	Hexavalent chromium (and its compounds)	kg	6.249	28.415	-	34.664	-	-	-	128.186
2014	NA - 19	Hexavalent chromium (and its compounds)	kg	6.204	28.835	-	35.039	-	-	-	138.400
2013	NA - 19	Hexavalent chromium (and its compounds)	kg	6.371	31.422	-	37.793	-	-	-	196.339
2012	NA - 19	Hexavalent chromium (and its compounds)	kg	6.295	29.418	-	35.713	-	-	-	196.339
2011	NA - 19	Hexavalent chromium (and its compounds)	kg	6.123	29.173	-	35.296	-	-	-	188.241
2010	NA - 19	Hexavalent chromium (and	kg	6.393	31.159	-	37.552	52.346	-	-	155.851

2010	NA - 19	its compounds)	kg	6.393	31.159	-	37.552	52.346	-	-	155.851
2009	NA - 19	Hexavalent chromium (and its compounds)	kg	6.620	28.841	-	35.461	39.759	-	-	105.391
2008	NA - 19	Hexavalent chromium (and its compounds)	kg	6.348	27.994	-	34.342	38.764	-	-	107.017
2007	NA - 19	Hexavalent chromium (and its compounds)	kg	7.119	32.795	-	39.914	43.116	-	-	229.010
2006	NA - 19	Hexavalent chromium (and its compounds)	kg	5.329	33.065	-	38.394	16.478	-	-	85.708
2005	NA - 19	Hexavalent chromium (and its compounds)	kg	5.291	32.803	-	38.094	16.745	-	-	73.392
2004	NA - 19	Hexavalent chromium (and its compounds)	kg	5.487	32.605	-	38.092	53.682	-	-	42.088
2003	NA - 19	Hexavalent chromium (and its compounds)	kg	5.462	30.750	-	36.212	89.016	-	-	-
2002	NA - 19	Hexavalent chromium (and its compounds)	kg	5.382	30.114	-	35.496	88.753	-	-	-
2019	7647-01-0	Hydrochloric acid	tonnes	4.538	-	-	4.538	-	-	-	-
2018	7647-01-0	Hydrochloric acid	tonnes	4.273	-	-	4.273	-	-	-	-
1997	7647-01-0	Hydrochloric acid	tonnes	0.537	0.000	-	0.537	-	-	-	-
1996	7647-01-0	Hydrochloric acid	tonnes	0.432	0.000	-	0.432	-	-	-	-
1995	7647-01-0	Hydrochloric acid	tonnes	0.522	0.005	-	0.527	-	-	-	-
1994	7647-01-0	Hydrochloric acid	tonnes	0.415	6.442	-	6.857	-	-	-	-
1993	7647-01-0	Hydrochloric acid	tonnes	0.410	16.097	-	16.507	-	-	-	-
2018	7783-06-4	Hydrogen sulphide	tonnes	11.941	-	-	11.941	-	-	-	-
2017	7783-06-4	Hydrogen sulphide	tonnes	14.408	-	-	14.408	-	-	-	-
2016	7783-06-4	Hydrogen sulphide	tonnes	13.447	-	-	13.447	-	-	-	-
2015	7783-06-4	Hydrogen sulphide	tonnes	10.765	-	-	10.765	-	-	-	-
2014	7783-06-4	Hydrogen sulphide	tonnes	11.217	-	-	11.217	-	-	-	-
2013	7783-06-4	Hydrogen sulphide	tonnes	12.176	-	-	12.176	-	-	-	-
2012	7783-06-4	Hydrogen sulphide	tonnes	12.763	-	-	12.763	-	-	-	-
2011	7783-06-4	Hydrogen sulphide	tonnes	13.472	-	-	13.472	-	-	-	-
2010	7783-06-4	Hydrogen sulphide	tonnes	12.379	-	-	12.379	-	-	-	-
2009	7783-06-4	Hydrogen sulphide	tonnes	12.751	-	-	12.751	-	-	-	-
2008	7783-06-4	Hydrogen sulphide	tonnes	11.278	-	-	11.278	-	-	-	-
2007	7783-06-4	Hydrogen sulphide	tonnes	14.715	-	-	14.715	-	-	-	-
2006	7783-06-4	Hydrogen sulphide	tonnes	14.288	-	-	14.288	-	-	-	-
2005	7783-06-4	Hydrogen sulphide	tonnes	28.599	-	-	28.599	-	-	-	-
2004	7783-06-4	Hydrogen sulphide	tonnes	18.609	-	-	18.609	-	-	-	-
2003	7783-06-4	Hydrogen sulphide	tonnes	16.975	-	-	16.975	-	-	-	-
2002	7783-06-4	Hydrogen sulphide	tonnes	16.988	-	-	16.988	-	-	-	-
1999	7783-06-4	Hydrogen sulphide	tonnes	13.860	-	-	13.860	-	-	-	-
2024	193-39-5	Indeno[1,2,3-c d]pyrene	kg	0.395	-	-	0.395	-	-	-	1.158

2023	193-39-5	Indeno[1,2,3-c d]pyrene	kg	0.411	-	-	0.411	-	-	-	0.059
2021	193-39-5	Indeno[1,2,3-c d]pyrene	kg	0.411	-	-	0.411	-	-	-	0.061
2020	193-39-5	Indeno[1,2,3-c d]pyrene	kg	0.411	-	-	0.411	-	-	-	0.105
2019	193-39-5	Indeno[1,2,3-c d]pyrene	kg	0.390	-	-	0.390	-	-	-	0.099
2018	193-39-5	Indeno[1,2,3-c d]pyrene	kg	0.375	-	-	0.375	-	-	-	0.071
2017	193-39-5	Indeno[1,2,3-c d]pyrene	kg	0.403	-	-	0.403	-	-	-	0.065
2016	193-39-5	Indeno[1,2,3-c d]pyrene	kg	0.408	-	-	0.408	-	-	-	0.083
2015	193-39-5	Indeno[1,2,3-c d]pyrene	kg	0.361	-	-	0.361	-	-	-	0.066
2014	193-39-5	Indeno[1,2,3-c d]pyrene	kg	0.376	-	-	0.376	-	-	-	0.068
2013	193-39-5	Indeno[1,2,3-c d]pyrene	kg	0.403	-	-	0.403	-	-	-	0.085
2012	193-39-5	Indeno[1,2,3-c d]pyrene	kg	0.398	-	-	0.398	-	-	-	0.073
2011	193-39-5	Indeno[1,2,3-c d]pyrene	kg	0.375	-	-	0.375	-	-	-	0.065
2010	193-39-5	Indeno[1,2,3-c d]pyrene	kg	0.398	0.000	0.000	0.398	-	-	-	0.079
2009	193-39-5	Indeno[1,2,3-c d]pyrene	kg	0.374	0.000	0.000	0.374	-	-	-	0.073
2008	193-39-5	Indeno[1,2,3-c d]pyrene	kg	0.374	-	0.000	0.374	-	-	-	0.076
2007	193-39-5	Indeno[1,2,3-c d]pyrene	kg	0.312	-	0.000	0.312	-	-	-	0.086
2006	193-39-5	Indeno[1,2,3-c d]pyrene	kg	4.018	-	0.000	4.018	-	-	-	0.764
2005	193-39-5	Indeno[1,2,3-c d]pyrene	kg	3.941	-	0.000	3.941	-	-	-	0.790
2004	193-39-5	Indeno[1,2,3-c d]pyrene	kg	4.121	-	0.287	4.408	0.287	-	-	-
2003	193-39-5	Indeno[1,2,3-c d]pyrene	kg	4.068	-	-	4.068	1.059	-	-	-
2002	193-39-5	Indeno[1,2,3-c d]pyrene	kg	4.068	-	-	4.068	1.127	-	-	-
2001	193-39-5	Indeno[1,2,3-c d]pyrene	kg	4.050	-	-	4.050	1.140	-	-	-
2000	193-39-5	Indeno[1,2,3-c d]pyrene	kg	3.970	-	-	3.970	2.230	-	-	-
2024	NA - 08	Lead (and its compounds)	kg	13.203	32.737	-	45.940	-	-	8.695	130.679
2023	NA - 08	Lead (and its compounds)	kg	13.869	21.505	-	35.374	-	-	72.510	120.897
2021	NA - 08	Lead (and its compounds)	kg	13.839	29.613	-	43.452	-	-	-	196.664
2020	NA - 08	Lead (and its compounds)	kg	14.010	23.406	-	37.416	-	-	-	184.184
2019	NA - 08	Lead (and its compounds)	kg	13.176	34.339	-	47.515	-	-	-	192.310
2018	NA - 08	Lead (and its compounds)	kg	13.144	38.044	-	51.188	-	-	1.522	148.510
2017	NA - 08	Lead (and its compounds)	kg	13.705	56.087	-	69.792	-	-	-	151.143
2016	NA - 08	Lead (and its compounds)	kg	13.939	45.827	-	59.766	-	-	-	181.767
2015	NA - 08	Lead (and its compounds)	kg	12.133	44.733	-	56.866	-	-	-	155.553
2014	NA - 08	Lead (and its compounds)	kg	13.885	51.532	-	65.417	-	-	-	149.805
2013	NA - 08	Lead (and its compounds)	kg	15.175	52.580	-	67.755	-	-	-	279.209
2012	NA - 08	Lead (and its compounds)	kg	14.892	47.849	-	62.741	-	-	-	245.248
2011	NA - 08	Lead (and its compounds)	kg	13.725	62.681	-	76.406	-	-	-	224.481
2010	NA - 08	Lead (and its compounds)	kg	15.360	63.819	-	79.179	23.200	-	-	179.300
2009	NA - 08	Lead (and its compounds)	kg	16.238	72.392	-	88.630	190.300	-	-	172.200
2008	NA - 08	Lead (and its compounds)	kg	16.525	48.231	-	64.756	185.416	-	-	344.318

2008	NA - 08	compounds)	kg	16.525	48.231	-	64.756	185.416	-	-	344.318
2007	NA - 08	Lead (and its compounds)	kg	23.670	55.316	-	78.986	206.040	-	-	724.046
2006	NA - 08	Lead (and its compounds)	kg	60.707	71.098	-	131.805	173.469	-	-	613.076
2005	NA - 08	Lead (and its compounds)	kg	59.657	111.264	-	170.921	176.060	-	-	588.960
2004	NA - 08	Lead (and its compounds)	kg	59.876	60.826	-	120.702	1001.100	-	-	1389.400
2003	NA - 08	Lead (and its compounds)	kg	58.500	57.360	-	115.860	867.090	-	-	-
2002	NA - 08	Lead (and its compounds)	kg	65.712	56.179	-	121.891	1393.240	-	-	-
2024	NA - 09	Manganese (and its compounds)	tonnes	0.076	23.700	-	23.776	-	-	0.093	137.315
2023	NA - 09	Manganese (and its compounds)	tonnes	0.080	20.975	-	21.055	-	-	31.294	142.902
2021	NA - 09	Manganese (and its compounds)	tonnes	0.079	23.007	-	23.086	-	-	-	152.827
2020	NA - 09	Manganese (and its compounds)	tonnes	0.082	25.262	-	25.344	-	-	-	170.138
2019	NA - 09	Manganese (and its compounds)	tonnes	0.072	31.867	-	31.939	-	-	-	160.124
2018	NA - 09	Manganese (and its compounds)	tonnes	0.079	27.674	-	27.753	-	-	1.486	154.355
2017	NA - 09	Manganese (and its compounds)	tonnes	0.081	30.759	-	30.840	-	-	-	116.134
2016	NA - 09	Manganese (and its compounds)	tonnes	0.084	38.042	-	38.126	-	-	-	157.763
2015	NA - 09	Manganese (and its compounds)	tonnes	0.068	43.661	-	43.729	-	-	-	141.020
2014	NA - 09	Manganese (and its compounds)	tonnes	0.082	41.310	-	41.392	-	-	-	108.216
2013	NA - 09	Manganese (and its compounds)	tonnes	0.095	41.589	-	41.684	-	-	-	141.070
2012	NA - 09	Manganese (and its compounds)	tonnes	0.092	42.045	-	42.137	-	-	-	294.654
2011	NA - 09	Manganese (and its compounds)	tonnes	0.083	48.933	-	49.016	-	-	-	274.016
2010	NA - 09	Manganese (and its compounds)	tonnes	0.096	54.934	-	55.030	52.661	-	-	157.716
2009	NA - 09	Manganese (and its compounds)	tonnes	0.087	50.964	-	51.051	32.689	-	-	64.088
2008	NA - 09	Manganese (and its compounds)	tonnes	0.089	68.019	-	68.108	31.377	-	-	67.363
2007	NA - 09	Manganese (and its compounds)	tonnes	0.109	114.189	-	114.298	34.085	-	-	83.413
2006	NA - 09	Manganese (and its compounds)	tonnes	0.115	67.292	-	67.407	31.099	-	-	74.383
2005	NA - 09	Manganese (and its compounds)	tonnes	0.112	65.566	-	65.678	31.330	-	-	73.200
2004	NA - 09	Manganese (and its compounds)	tonnes	0.113	29.465	-	29.578	85.700	-	-	37.850
2003	NA - 09	Manganese (and its compounds)	tonnes	0.110	27.788	-	27.898	148.730	-	-	-
2002	NA - 09	Manganese	tonnes	0.130	27.214	-	27.344	48.960	-	-	-

2002	NA - 09	(and its compounds)	tonnes	0.130	27.214	-	27.344	48.960	-	-	-
2001	NA - 09	Manganese (and its compounds)	tonnes	0.120	26.590	-	26.710	45.560	-	-	-
2000	NA - 09	Manganese (and its compounds)	tonnes	0.110	25.070	-	25.180	73.570	-	-	-
1999	NA - 09	Manganese (and its compounds)	tonnes	0.070	24.210	-	24.280	28.220	-	-	-
2024	67-56-1	Methanol	tonnes	82.556	54.160	-	136.716	-	-	-	-
2023	67-56-1	Methanol	tonnes	82.749	58.394	-	141.143	-	-	-	-
2021	67-56-1	Methanol	tonnes	85.932	55.130	-	141.062	-	-	-	-
2020	67-56-1	Methanol	tonnes	85.387	30.245	-	115.632	-	-	-	-
2019	67-56-1	Methanol	tonnes	83.636	22.321	-	105.957	-	-	-	-
2018	67-56-1	Methanol	tonnes	77.931	68.182	-	146.113	-	-	-	-
2017	67-56-1	Methanol	tonnes	82.563	86.553	-	169.116	-	-	-	-
2016	67-56-1	Methanol	tonnes	85.440	243.357	-	328.797	-	-	-	-
2015	67-56-1	Methanol	tonnes	119.744	243.999	-	363.743	-	-	-	-
2014	67-56-1	Methanol	tonnes	114.848	125.067	-	239.915	-	-	-	-
2013	67-56-1	Methanol	tonnes	111.129	0.000	-	111.129	-	-	-	-
2012	67-56-1	Methanol	tonnes	109.148	0.000	-	109.148	-	-	-	-
2011	67-56-1	Methanol	tonnes	107.766	212.648	-	320.414	-	-	-	-
2010	67-56-1	Methanol	tonnes	111.338	174.564	-	285.902	-	-	-	-
2009	67-56-1	Methanol	tonnes	109.438	102.507	-	211.945	-	-	-	-
2008	67-56-1	Methanol	tonnes	103.265	146.718	-	249.983	-	-	-	-
2007	67-56-1	Methanol	tonnes	109.850	298.313	-	408.163	-	-	-	-
2006	67-56-1	Methanol	tonnes	122.650	208.286	-	330.936	-	-	-	-
2005	67-56-1	Methanol	tonnes	122.177	115.238	-	237.415	-	-	-	-
2004	67-56-1	Methanol	tonnes	143.369	315.187	-	458.556	-	-	-	-
2003	67-56-1	Methanol	tonnes	141.000	297.300	-	438.300	-	-	-	-
2002	67-56-1	Methanol	tonnes	142.493	291.112	-	433.605	-	-	-	-
2001	67-56-1	Methanol	tonnes	136.150	281.620	-	417.770	-	-	-	-
2000	67-56-1	Methanol	tonnes	246.550	571.270	-	817.820	-	-	-	-
1999	67-56-1	Methanol	tonnes	236.420	681.600	-	918.020	-	-	-	-
1998	67-56-1	Methanol	tonnes	182.375	745.610	-	927.985	-	-	-	-
1997	67-56-1	Methanol	tonnes	171.885	824.078	-	995.963	-	-	-	-
1996	67-56-1	Methanol	tonnes	178.534	1933.834	-	2112.368	-	-	-	-
1995	67-56-1	Methanol	tonnes	185.179	3387.916	-	3573.095	-	-	-	-
1994	67-56-1	Methanol	tonnes	153.546	3129.039	-	3282.585	-	-	-	-
1993	67-56-1	Methanol	tonnes	151.320	3223.070	-	3374.390	-	-	-	-
2017	78-93-3	Methyl ethyl ketone	tonnes	0.617	5.354	-	5.971	-	-	-	-
2016	78-93-3	Methyl ethyl ketone	tonnes	0.642	5.531	-	6.173	-	-	-	-
2015	78-93-3	Methyl ethyl ketone	tonnes	1.200	5.135	-	6.335	-	-	-	-
2014	78-93-3	Methyl ethyl ketone	tonnes	1.152	5.211	-	6.363	-	-	-	-
2013	78-93-3	Methyl ethyl ketone	tonnes	1.125	5.679	-	6.804	-	-	-	-
2012	78-93-3	Methyl ethyl ketone	tonnes	1.108	5.317	-	6.425	-	-	-	-
2011	78-93-3	Methyl ethyl ketone	tonnes	1.089	5.272	-	6.361	-	-	-	-
2010	78-93-3	Methyl ethyl ketone	tonnes	1.131	5.631	-	6.762	-	-	-	-
2024	NA - 17	Nitrate ion in solution at pH >= 6.0	tonnes	-	39.453	-	39.453	-	-	-	-
2023	NA - 17	Nitrate ion in solution at pH >= 6.0	tonnes	-	56.170	-	56.170	-	-	-	-
2021	NA - 17	Nitrate ion in solution at pH >= 6.0	tonnes	-	99.054	0.000	99.054	-	-	-	-
2020	NA - 17	Nitrate ion in solution at pH >= 6.0	tonnes	-	72.746	-	72.746	-	-	-	-
2019	NA - 17	Nitrate ion in solution at pH >= 6.0	tonnes	-	49.044	-	49.044	-	-	-	-
2018	NA - 17	Nitrate ion in solution at pH >= 6.0	tonnes	-	50.475	-	50.475	-	-	-	-
2017	NA - 17	Nitrate ion in solution at pH >= 6.0	tonnes	-	37.822	-	37.822	-	-	-	-

2017	NA - 17	solution at pH ≥ 6.0	tonnes	-	37.822	-	37.822	-	-	-	-
2016	NA - 17	Nitrate ion in solution at pH ≥ 6.0	tonnes	-	23.049	-	23.049	-	-	-	-
2015	NA - 17	Nitrate ion in solution at pH ≥ 6.0	tonnes	-	17.991	-	17.991	-	-	-	-
2014	NA - 17	Nitrate ion in solution at pH ≥ 6.0	tonnes	-	15.706	-	15.706	-	-	-	-
2013	NA - 17	Nitrate ion in solution at pH ≥ 6.0	tonnes	-	10.688	-	10.688	-	-	-	-
2012	NA - 17	Nitrate ion in solution at pH ≥ 6.0	tonnes	-	10.006	-	10.006	-	-	-	-
2011	NA - 17	Nitrate ion in solution at pH ≥ 6.0	tonnes	-	8.872	-	8.872	-	-	-	-
2010	NA - 17	Nitrate ion in solution at pH ≥ 6.0	tonnes	-	4.239	-	4.239	-	-	-	-
2009	NA - 17	Nitrate ion in solution at pH ≥ 6.0	tonnes	-	10.515	-	10.515	-	-	-	-
2008	NA - 17	Nitrate ion in solution at pH ≥ 6.0	tonnes	-	0.000	-	0.000	-	-	-	-
2007	NA - 17	Nitrate ion in solution at pH ≥ 6.0	tonnes	-	10.936	-	10.936	-	-	-	-
2006	NA - 17	Nitrate ion in solution at pH ≥ 6.0	tonnes	-	14.856	-	14.856	-	-	-	-
2005	NA - 17	Nitrate ion in solution at pH ≥ 6.0	tonnes	-	121.425	-	121.425	-	-	-	-
2004	NA - 17	Nitrate ion in solution at pH ≥ 6.0	tonnes	-	120.692	-	120.692	-	-	-	-
2003	NA - 17	Nitrate ion in solution at pH ≥ 6.0	tonnes	-	113.825	-	113.825	-	-	-	-
2002	NA - 17	Nitrate ion in solution at pH ≥ 6.0	tonnes	-	111.473	-	111.473	-	-	-	-
2001	NA - 17	Nitrate ion in solution at pH ≥ 6.0	tonnes	-	108.930	-	108.930	-	-	-	-
2021	7697-37-2	Nitric acid	tonnes	-	-	-	0.000	-	-	-	-
2020	7697-37-2	Nitric acid	tonnes	-	-	-	0.000	-	-	-	-
2019	7697-37-2	Nitric acid	tonnes	-	-	-	0.000	-	-	-	-
2018	7697-37-2	Nitric acid	tonnes	-	-	-	0.000	-	-	-	-
2017	7697-37-2	Nitric acid	tonnes	-	-	-	0.000	-	-	-	-
2016	7697-37-2	Nitric acid	tonnes	-	-	-	0.000	-	-	-	-
2015	7697-37-2	Nitric acid	tonnes	-	-	-	0.000	-	-	-	-
2014	7697-37-2	Nitric acid	tonnes	-	-	-	0.000	-	-	-	-
2013	7697-37-2	Nitric acid	tonnes	-	-	-	0.000	-	-	-	-
2012	7697-37-2	Nitric acid	tonnes	-	-	-	0.000	-	-	-	-
2011	7697-37-2	Nitric acid	tonnes	-	-	-	0.000	-	-	-	-
2010	7697-37-2	Nitric acid	tonnes	0.000	0.000	-	0.000	-	-	-	-
2009	7697-37-2	Nitric acid	tonnes	0.000	0.000	-	0.000	-	-	-	-
2008	7697-37-2	Nitric acid	tonnes	0.000	0.000	-	0.000	-	-	-	-
2007	7697-37-2	Nitric acid	tonnes	0.000	0.000	-	0.000	-	-	-	-
2006	7697-37-2	Nitric acid	tonnes	0.000	0.000	-	0.000	-	-	-	-
2005	7697-37-2	Nitric acid	tonnes	0.000	0.000	-	0.000	-	-	-	-
2004	7697-37-2	Nitric acid	tonnes	0.000	0.000	-	0.000	-	-	-	-
2003	7697-37-2	Nitric acid	tonnes	0.000	0.000	-	0.000	0.000	-	-	-
2002	7697-37-2	Nitric acid	tonnes	0.000	0.000	-	0.000	0.000	-	-	-
2001	7697-37-2	Nitric acid	tonnes	0.000	0.000	-	0.000	0.000	-	-	-
2000	7697-37-2	Nitric acid	tonnes	-	-	-	0.000	-	-	-	-
1999	7697-37-2	Nitric acid	tonnes	-	-	-	0.000	-	-	-	-
2024	11104-93-1	Nitrogen oxides (expressed as nitrogen	tonnes	1104.994	-	-	1104.994	-	-	-	-

2024	11104-93-1	dioxide)	tonnes	1104.994	-	-	1104.994	-	-	-	-
2023	11104-93-1	Nitrogen oxides (expressed as nitrogen dioxide)	tonnes	1038.118	-	-	1038.118	-	-	-	-
2021	11104-93-1	Nitrogen oxides (expressed as nitrogen dioxide)	tonnes	969.518	-	-	969.518	-	-	-	-
2020	11104-93-1	Nitrogen oxides (expressed as nitrogen dioxide)	tonnes	1040.685	-	-	1040.685	-	-	-	-
2019	11104-93-1	Nitrogen oxides (expressed as nitrogen dioxide)	tonnes	991.355	-	-	991.355	-	-	-	-
2018	11104-93-1	Nitrogen oxides (expressed as nitrogen dioxide)	tonnes	932.862	-	-	932.862	-	-	-	-
2017	11104-93-1	Nitrogen oxides (expressed as nitrogen dioxide)	tonnes	948.429	-	-	948.429	-	-	-	-
2016	11104-93-1	Nitrogen oxides (expressed as nitrogen dioxide)	tonnes	880.423	-	-	880.423	-	-	-	-
2015	11104-93-1	Nitrogen oxides (expressed as nitrogen dioxide)	tonnes	871.303	-	-	871.303	-	-	-	-
2014	11104-93-1	Nitrogen oxides (expressed as nitrogen dioxide)	tonnes	943.177	-	-	943.177	-	-	-	-
2013	11104-93-1	Nitrogen oxides (expressed as nitrogen dioxide)	tonnes	935.343	-	-	935.343	-	-	-	-
2012	11104-93-1	Nitrogen oxides (expressed as nitrogen dioxide)	tonnes	935.343	-	-	935.343	-	-	-	-
2011	11104-93-1	Nitrogen oxides (expressed as nitrogen dioxide)	tonnes	893.468	-	-	893.468	-	-	-	-
2010	11104-93-1	Nitrogen oxides (expressed as nitrogen dioxide)	tonnes	946.631	-	-	946.631	-	-	-	-
2009	11104-93-1	Nitrogen oxides (expressed as nitrogen dioxide)	tonnes	1032.293	-	-	1032.293	-	-	-	-
2008	11104-93-1	Nitrogen oxides (expressed as nitrogen dioxide)	tonnes	959.213	-	-	959.213	-	-	-	-
2007	11104-93-1	Nitrogen	tonnes	1015.400	-	-	1015.400	-	-	-	-

2007	11104-93-1	oxides (expressed as nitrogen dioxide)	tonnes	1015.400	-	-	1015.400	-	-	-	-
2006	11104-93-1	Nitrogen oxides (expressed as nitrogen dioxide)	tonnes	1037.626	-	-	1037.626	-	-	-	-
2005	11104-93-1	Nitrogen oxides (expressed as nitrogen dioxide)	tonnes	920.680	-	-	920.680	-	-	-	-
2004	11104-93-1	Nitrogen oxides (expressed as nitrogen dioxide)	tonnes	921.481	-	-	921.481	-	-	-	-
2003	11104-93-1	Nitrogen oxides (expressed as nitrogen dioxide)	tonnes	909.931	-	-	909.931	-	-	-	-
2002	11104-93-1	Nitrogen oxides (expressed as nitrogen dioxide)	tonnes	1490.455	-	-	1490.455	-	-	-	-
2024	198-55-0	Perylene	kg	0.030	-	-	0.030	-	-	-	-
2023	198-55-0	Perylene	kg	0.030	-	-	0.030	-	-	-	-
2021	198-55-0	Perylene	kg	0.030	-	-	0.030	-	-	-	-
2020	198-55-0	Perylene	kg	0.030	-	-	0.030	-	-	-	-
2019	198-55-0	Perylene	kg	0.029	-	-	0.029	-	-	-	-
2018	198-55-0	Perylene	kg	0.027	-	-	0.027	-	-	-	-
2017	198-55-0	Perylene	kg	0.029	-	-	0.029	-	-	-	-
2016	198-55-0	Perylene	kg	0.029	-	-	0.029	-	-	-	-
2015	198-55-0	Perylene	kg	0.027	-	-	0.027	-	-	-	-
2014	198-55-0	Perylene	kg	0.027	-	-	0.027	-	-	-	-
2013	198-55-0	Perylene	kg	0.028	-	-	0.028	-	-	-	-
2012	198-55-0	Perylene	kg	0.027	-	-	0.027	-	-	-	-
2011	198-55-0	Perylene	kg	0.026	-	-	0.026	-	-	-	-
2010	198-55-0	Perylene	kg	0.028	-	-	0.028	-	-	-	-
2009	198-55-0	Perylene	kg	0.027	-	-	0.027	-	-	-	-
2008	198-55-0	Perylene	kg	0.026	-	-	0.026	-	-	-	-
2007	198-55-0	Perylene	kg	0.027	-	-	0.027	-	-	-	-
2006	198-55-0	Perylene	kg	-	-	-	0.000	-	-	-	-
2005	198-55-0	Perylene	kg	0.000	-	-	0.000	-	-	-	-
2004	198-55-0	Perylene	kg	0.000	-	-	0.000	-	-	-	-
2003	198-55-0	Perylene	kg	0.000	-	-	0.000	-	-	-	-
2002	198-55-0	Perylene	kg	0.000	-	-	0.000	0.000	-	-	-
2001	198-55-0	Perylene	kg	0.000	-	-	0.000	0.000	-	-	-
2000	198-55-0	Perylene	kg	0.000	-	-	0.000	0.000	-	-	-
2024	85-01-8	Phenanthrene	kg	115.157	-	-	115.157	-	-	-	7.631
2023	85-01-8	Phenanthrene	kg	117.392	-	-	117.392	-	-	-	3.757
2021	85-01-8	Phenanthrene	kg	115.857	-	-	115.857	-	-	-	3.422
2020	85-01-8	Phenanthrene	kg	117.724	-	-	117.724	-	-	-	4.477
2019	85-01-8	Phenanthrene	kg	113.261	-	-	113.261	-	-	-	4.703
2018	85-01-8	Phenanthrene	kg	105.507	-	-	105.507	-	-	-	3.596
2017	85-01-8	Phenanthrene	kg	112.597	-	-	112.597	-	-	-	2.837
2016	85-01-8	Phenanthrene	kg	113.789	-	-	113.789	-	-	-	3.711
2015	85-01-8	Phenanthrene	kg	104.177	-	-	104.177	-	-	-	2.887
2014	85-01-8	Phenanthrene	kg	104.495	-	-	104.495	-	-	-	3.154
2013	85-01-8	Phenanthrene	kg	108.967	-	-	108.967	-	-	-	3.763
2012	85-01-8	Phenanthrene	kg	107.438	-	-	107.438	-	-	-	3.252
2011	85-01-8	Phenanthrene	kg	103.992	-	-	103.992	-	-	-	2.831
2010	85-01-8	Phenanthrene	kg	109.390	0.000	0.000	109.390	-	-	-	3.445
2009	85-01-8	Phenanthrene	kg	104.533	4.066	0.000	108.599	-	-	-	3.183
2008	85-01-8	Phenanthrene	kg	100.734	3.946	0.000	104.680	-	-	-	3.301
2007	85-01-8	Phenanthrene	kg	102.394	4.623	0.000	107.017	-	-	-	2.447
2006	85-01-8	Phenanthrene	kg	105.715	4.686	0.000	110.401	-	-	-	11.409
2005	85-01-8	Phenanthrene	kg	103.523	4.649	0.000	108.172	-	-	-	11.750
2004	85-01-8	Phenanthrene	kg	108.691	4.621	4.300	117.612	4.300	-	-	-
2003	85-01-8	Phenanthrene	kg	107.670	4.360	-	112.030	15.800	-	-	-
2002	85-01-8	Phenanthrene	kg	107.798	4.268	-	112.066	16.832	-	-	-
2001	85-01-8	Phenanthrene	kg	107.320	4.170	-	111.490	11.710	-	-	-
2000	85-01-8	Phenanthrene	kg	107.260	3.930	-	111.190	22.990	-	-	-

2010	108-95-2	Phenol (and its tonnes salts)		5.495	1.719	-	7.214	-	-	-	-
2009	108-95-2	Phenol (and its tonnes salts)		5.382	1.591	-	6.973	-	-	-	-
2008	108-95-2	Phenol (and its tonnes salts)		5.061	1.545	-	6.606	-	-	-	-
2007	108-95-2	Phenol (and its tonnes salts)		1.234	1.810	-	3.044	-	-	-	-
2006	108-95-2	Phenol (and its tonnes salts)		11.461	1.835	-	13.296	-	-	-	-
2024	NA - 22	Phosphorus (total)	tonnes	0.204	45.258	-	45.462	-	-	-	58.026
2023	NA - 22	Phosphorus (total)	tonnes	0.213	40.091	-	40.304	-	-	0.526	48.843
2021	NA - 22	Phosphorus (total)	tonnes	0.212	42.371	-	42.584	-	-	-	48.633
2020	NA - 22	Phosphorus (total)	tonnes	0.218	15.880	-	16.098	-	-	-	57.651
2019	NA - 22	Phosphorus (total)	tonnes	0.197	14.640	-	14.837	-	-	-	62.597
2018	NA - 22	Phosphorus (total)	tonnes	0.206	15.837	-	16.043	-	-	-	58.716
2017	NA - 22	Phosphorus (total)	tonnes	0.214	12.722	-	12.936	-	-	-	63.289
2016	NA - 22	Phosphorus (total)	tonnes	0.219	15.360	-	15.579	-	-	-	76.369
2015	NA - 22	Phosphorus (total)	tonnes	0.185	13.672	-	13.857	-	-	-	54.268
2014	NA - 22	Phosphorus (total)	tonnes	0.213	12.946	-	13.159	-	-	-	54.951
2013	NA - 22	Phosphorus (total)	tonnes	0.239	13.411	-	13.650	-	-	-	57.864
2012	NA - 22	Phosphorus (total)	tonnes	0.233	12.618	-	12.851	-	-	-	67.550
2011	NA - 22	Phosphorus (total)	tonnes	0.214	13.327	-	13.541	-	-	-	58.168
2010	NA - 22	Phosphorus (total)	tonnes	0.241	13.529	-	13.770	2.942	-	-	56.354
2009	NA - 22	Phosphorus (total)	tonnes	0.227	13.577	-	13.804	1.847	-	-	55.353
2008	NA - 22	Phosphorus (total)	tonnes	0.231	12.985	-	13.216	1.798	-	-	63.082
2007	NA - 22	Phosphorus (total)	tonnes	0.297	13.540	-	13.837	1.995	-	-	55.400
2006	NA - 22	Phosphorus (total)	tonnes	-	12.486	-	12.486	1.688	-	-	55.425
2005	NA - 22	Phosphorus (total)	tonnes	-	12.732	-	12.732	1.710	-	-	52.580
2004	NA - 22	Phosphorus (total)	tonnes	-	16.532	-	16.532	31.880	-	-	39.010
2003	NA - 22	Phosphorus (total)	tonnes	-	15.717	-	15.717	79.480	-	-	-
2024	NA - M09	PM10 - Particulate Matter <= 10 Micrometers	tonnes	126.683	-	-	126.683	-	-	-	-
2023	NA - M09	PM10 - Particulate Matter <= 10 Micrometers	tonnes	112.349	-	-	112.349	-	-	-	-
2021	NA - M09	PM10 - Particulate Matter <= 10 Micrometers	tonnes	142.581	-	-	142.581	-	-	-	-
2020	NA - M09	PM10 - Particulate Matter <= 10 Micrometers	tonnes	98.541	-	-	98.541	-	-	-	-
2019	NA - M09	PM10 - Particulate Matter <= 10 Micrometers	tonnes	96.915	-	-	96.915	-	-	-	-
2018	NA - M09	PM10 - Particulate Matter <= 10 Micrometers	tonnes	68.540	-	-	68.540	-	-	-	-
2017	NA - M09	PM10 - Particulate Matter <= 10 Micrometers	tonnes	119.176	-	-	119.176	-	-	-	-

2017	NA - M09	Particulate Matter <= 10 Micrometers	tonnes	119.176	-	-	119.176	-	-	-	-
2016	NA - M09	PM10 - Particulate Matter <= 10 Micrometers	tonnes	91.697	-	-	91.697	-	-	-	-
2015	NA - M09	PM10 - Particulate Matter <= 10 Micrometers	tonnes	179.563	-	-	179.563	-	-	-	-
2014	NA - M09	PM10 - Particulate Matter <= 10 Micrometers	tonnes	141.655	-	-	141.655	-	-	-	-
2013	NA - M09	PM10 - Particulate Matter <= 10 Micrometers	tonnes	75.322	-	-	75.322	-	-	-	-
2012	NA - M09	PM10 - Particulate Matter <= 10 Micrometers	tonnes	40.168	-	-	40.168	-	-	-	-
2011	NA - M09	PM10 - Particulate Matter <= 10 Micrometers	tonnes	93.071	-	-	93.071	-	-	-	-
2010	NA - M09	PM10 - Particulate Matter <= 10 Micrometers	tonnes	95.351	-	-	95.351	-	-	-	-
2009	NA - M09	PM10 - Particulate Matter <= 10 Micrometers	tonnes	109.792	-	-	109.792	-	-	-	-
2008	NA - M09	PM10 - Particulate Matter <= 10 Micrometers	tonnes	108.750	-	-	108.750	-	-	-	-
2007	NA - M09	PM10 - Particulate Matter <= 10 Micrometers	tonnes	160.955	-	-	160.955	-	-	-	-
2006	NA - M09	PM10 - Particulate Matter <= 10 Micrometers	tonnes	162.516	-	-	162.516	-	-	-	-
2005	NA - M09	PM10 - Particulate Matter <= 10 Micrometers	tonnes	136.928	-	-	136.928	-	-	-	-
2004	NA - M09	PM10 - Particulate Matter <= 10 Micrometers	tonnes	220.672	-	-	220.672	-	-	-	-
2003	NA - M09	PM10 - Particulate Matter <= 10 Micrometers	tonnes	217.906	-	-	217.906	-	-	-	-
2002	NA - M09	PM10 - Particulate Matter <= 10 Micrometers	tonnes	217.906	-	-	217.906	-	-	-	-
2024	NA - M10	PM2.5 - Particulate Matter <= 2.5 Micrometers	tonnes	80.584	-	-	80.584	-	-	-	-
2023	NA - M10	PM2.5 - Particulate Matter <= 2.5 Micrometers	tonnes	68.221	-	-	68.221	-	-	-	-
2021	NA - M10	PM2.5 - Particulate Matter <= 2.5 Micrometers	tonnes	86.236	-	-	86.236	-	-	-	-
2020	NA - M10	PM2.5 - Particulate	tonnes	63.153	-	-	63.153	-	-	-	-

2020	NA - M10	Matter <= 2.5 Micrometers	tonnes	63.153	-	-	63.153	-	-	-	-
2019	NA - M10	PM2.5 - Particulate Matter <= 2.5 Micrometers	tonnes	63.274	-	-	63.274	-	-	-	-
2018	NA - M10	PM2.5 - Particulate Matter <= 2.5 Micrometers	tonnes	45.696	-	-	45.696	-	-	-	-
2017	NA - M10	PM2.5 - Particulate Matter <= 2.5 Micrometers	tonnes	78.644	-	-	78.644	-	-	-	-
2016	NA - M10	PM2.5 - Particulate Matter <= 2.5 Micrometers	tonnes	61.729	-	-	61.729	-	-	-	-
2015	NA - M10	PM2.5 - Particulate Matter <= 2.5 Micrometers	tonnes	120.111	-	-	120.111	-	-	-	-
2014	NA - M10	PM2.5 - Particulate Matter <= 2.5 Micrometers	tonnes	96.653	-	-	96.653	-	-	-	-
2013	NA - M10	PM2.5 - Particulate Matter <= 2.5 Micrometers	tonnes	50.864	-	-	50.864	-	-	-	-
2012	NA - M10	PM2.5 - Particulate Matter <= 2.5 Micrometers	tonnes	27.001	-	-	27.001	-	-	-	-
2011	NA - M10	PM2.5 - Particulate Matter <= 2.5 Micrometers	tonnes	62.124	-	-	62.124	-	-	-	-
2010	NA - M10	PM2.5 - Particulate Matter <= 2.5 Micrometers	tonnes	63.654	-	-	63.654	-	-	-	-
2009	NA - M10	PM2.5 - Particulate Matter <= 2.5 Micrometers	tonnes	72.655	-	-	72.655	-	-	-	-
2008	NA - M10	PM2.5 - Particulate Matter <= 2.5 Micrometers	tonnes	69.863	-	-	69.863	-	-	-	-
2007	NA - M10	PM2.5 - Particulate Matter <= 2.5 Micrometers	tonnes	128.302	-	-	128.302	-	-	-	-
2006	NA - M10	PM2.5 - Particulate Matter <= 2.5 Micrometers	tonnes	145.331	-	-	145.331	-	-	-	-
2005	NA - M10	PM2.5 - Particulate Matter <= 2.5 Micrometers	tonnes	123.426	-	-	123.426	-	-	-	-
2004	NA - M10	PM2.5 - Particulate Matter <= 2.5 Micrometers	tonnes	199.719	-	-	199.719	-	-	-	-
2003	NA - M10	PM2.5 - Particulate Matter <= 2.5 Micrometers	tonnes	197.183	-	-	197.183	-	-	-	-
2002	NA - M10	PM2.5 - Particulate Matter <= 2.5 Micrometers	tonnes	197.183	-	-	197.183	-	-	-	-
2024	129-00-0	Pyrene	kg	28.643	1.315	-	29.958	-	-	-	4.403
2023	129-00-0	Pyrene	kg	29.330	1.319	-	30.648	-	-	-	0.933
2021	129-00-0	Pyrene	kg	28.957	1.323	-	30.280	-	-	-	0.904

2020	129-00-0	Pyrene	kg	29.426	1.283	-	30.709	-	-	-	1.359
2019	129-00-0	Pyrene	kg	28.070	1.202	-	29.272	-	-	-	1.347
2018	129-00-0	Pyrene	kg	26.567	1.069	-	27.636	-	-	-	1.010
2017	129-00-0	Pyrene	kg	28.280	1.249	-	29.529	-	-	-	0.859
2016	129-00-0	Pyrene	kg	28.641	1.291	-	29.932	-	-	-	1.120
2015	129-00-0	Pyrene	kg	25.848	1.198	-	27.046	-	-	-	0.874
2014	129-00-0	Pyrene	kg	26.432	1.216	-	27.648	-	-	-	0.958
2013	129-00-0	Pyrene	kg	27.933	1.325	-	29.258	-	-	-	1.136
2012	129-00-0	Pyrene	kg	27.499	1.230	-	28.729	-	-	-	0.984
2011	129-00-0	Pyrene	kg	26.364	1.230	-	27.594	-	-	-	0.857
2010	129-00-0	Pyrene	kg	28.013	1.314	0.000	29.327	-	-	-	1.043
2009	129-00-0	Pyrene	kg	26.407	1.216	0.000	27.623	-	-	-	0.964
2008	129-00-0	Pyrene	kg	25.669	1.180	0.000	26.849	-	-	-	0.999
2007	129-00-0	Pyrene	kg	24.777	1.380	0.000	26.157	-	-	-	1.137
2006	129-00-0	Pyrene	kg	25.970	1.522	0.000	27.492	-	-	-	2.916
2005	129-00-0	Pyrene	kg	25.462	1.510	0.000	26.972	-	-	-	3.000
2004	129-00-0	Pyrene	kg	26.670	1.501	1.100	29.271	1.100	-	-	-
2003	129-00-0	Pyrene	kg	26.408	1.420	-	27.828	4.044	-	-	-
2002	129-00-0	Pyrene	kg	26.432	1.386	-	27.818	4.300	-	-	-
2001	129-00-0	Pyrene	kg	26.310	1.350	-	27.660	3.220	-	-	-
2000	129-00-0	Pyrene	kg	26.230	1.280	-	27.510	6.330	-	-	-
2021	NA - 12	Selenium (and its compounds)	kg	3.394	0.000	-	3.394	-	-	-	3.835
2020	NA - 12	Selenium (and its compounds)	kg	3.380	0.000	-	3.380	-	-	0.002	-
2011	NA - 12	Selenium (and its compounds)	kg	3.489	38.077	-	41.566	-	-	-	11.099
2024	7446-09-5	Sulphur dioxide	tonnes	404.211	-	-	404.211	-	-	-	-
2023	7446-09-5	Sulphur dioxide	tonnes	456.831	-	-	456.831	-	-	-	-
2021	7446-09-5	Sulphur dioxide	tonnes	465.069	-	-	465.069	-	-	-	-
2020	7446-09-5	Sulphur dioxide	tonnes	574.892	-	-	574.892	-	-	-	-
2019	7446-09-5	Sulphur dioxide	tonnes	798.858	-	-	798.858	-	-	-	-
2018	7446-09-5	Sulphur dioxide	tonnes	750.020	-	-	750.020	-	-	-	-
2017	7446-09-5	Sulphur dioxide	tonnes	1059.425	-	-	1059.425	-	-	-	-
2016	7446-09-5	Sulphur dioxide	tonnes	842.984	-	-	842.984	-	-	-	-
2015	7446-09-5	Sulphur dioxide	tonnes	813.725	-	-	813.725	-	-	-	-
2014	7446-09-5	Sulphur dioxide	tonnes	1087.535	-	-	1087.535	-	-	-	-
2013	7446-09-5	Sulphur dioxide	tonnes	912.378	-	-	912.378	-	-	-	-
2012	7446-09-5	Sulphur dioxide	tonnes	409.124	-	-	409.124	-	-	-	-
2011	7446-09-5	Sulphur dioxide	tonnes	410.098	-	-	410.098	-	-	-	-
2010	7446-09-5	Sulphur dioxide	tonnes	801.337	-	-	801.337	-	-	-	-
2009	7446-09-5	Sulphur dioxide	tonnes	1024.449	-	-	1024.449	-	-	-	-
2008	7446-09-5	Sulphur dioxide	tonnes	935.170	-	-	935.170	-	-	-	-
2007	7446-09-5	Sulphur dioxide	tonnes	2527.327	-	-	2527.327	-	-	-	-
2006	7446-09-5	Sulphur dioxide	tonnes	3267.740	-	-	3267.740	-	-	-	-
2005	7446-09-5	Sulphur dioxide	tonnes	3664.997	-	-	3664.997	-	-	-	-
2004	7446-09-5	Sulphur dioxide	tonnes	3366.639	-	-	3366.639	-	-	-	-
2003	7446-09-5	Sulphur dioxide	tonnes	3324.447	-	-	3324.447	-	-	-	-
2002	7446-09-5	Sulphur dioxide	tonnes	3324.415	-	-	3324.415	-	-	-	-
2024	7664-93-9	Sulphuric acid	tonnes	1.035	-	-	1.035	-	-	-	-
2023	7664-93-9	Sulphuric acid	tonnes	1.395	-	-	1.395	-	-	-	-
2021	7664-93-9	Sulphuric acid	tonnes	1.787	-	-	1.787	-	-	-	-
2020	7664-93-9	Sulphuric acid	tonnes	1.437	-	-	1.437	-	-	-	-
2019	7664-93-9	Sulphuric acid	tonnes	3.038	-	-	3.038	-	-	-	-
2018	7664-93-9	Sulphuric acid	tonnes	1.452	-	-	1.452	-	-	-	-

2017	7664-93-9	Sulphuric acid	tonnes	1.087	-	-	1.087	-	-	-	-
2016	7664-93-9	Sulphuric acid	tonnes	0.962	-	-	0.962	-	-	-	-
2015	7664-93-9	Sulphuric acid	tonnes	1.218	-	-	1.218	-	-	-	-
2014	7664-93-9	Sulphuric acid	tonnes	1.378	-	-	1.378	-	-	-	-
2013	7664-93-9	Sulphuric acid	tonnes	1.240	-	-	1.240	-	-	-	-
2012	7664-93-9	Sulphuric acid	tonnes	1.221	-	-	1.221	-	-	-	-
2011	7664-93-9	Sulphuric acid	tonnes	0.792	-	-	0.792	-	-	-	-
2010	7664-93-9	Sulphuric acid	tonnes	1.385	0.000	-	1.385	-	-	-	-
2009	7664-93-9	Sulphuric acid	tonnes	3.311	0.000	-	3.311	-	-	-	-
2008	7664-93-9	Sulphuric acid	tonnes	3.564	-	-	3.564	-	-	-	-
2007	7664-93-9	Sulphuric acid	tonnes	3.933	-	-	3.933	-	-	-	-
2006	7664-93-9	Sulphuric acid	tonnes	0.857	-	-	0.857	-	-	-	-
2005	7664-93-9	Sulphuric acid	tonnes	0.856	-	-	0.856	-	-	-	-
2004	7664-93-9	Sulphuric acid	tonnes	0.858	-	-	0.858	-	-	-	-
2003	7664-93-9	Sulphuric acid	tonnes	0.841	-	-	0.841	-	-	-	-
2002	7664-93-9	Sulphuric acid	tonnes	4.006	-	-	4.006	-	-	-	-
2001	7664-93-9	Sulphuric acid	tonnes	3.570	-	-	3.570	-	-	-	-
2000	7664-93-9	Sulphuric acid	tonnes	3.390	-	-	3.390	-	-	-	-
1999	7664-93-9	Sulphuric acid	tonnes	0.780	-	-	0.780	-	-	-	-
1997	7664-93-9	Sulphuric acid	tonnes	-	-	-	0.000	-	-	-	-
1996	7664-93-9	Sulphuric acid	tonnes	-	-	-	0.000	-	-	-	-
1995	7664-93-9	Sulphuric acid	tonnes	-	-	-	0.000	-	-	-	-
1994	7664-93-9	Sulphuric acid	tonnes	-	-	-	0.000	-	-	-	-
1993	7664-93-9	Sulphuric acid	tonnes	-	-	-	0.000	-	-	-	-
2010	108-88-3	Toluene	tonnes	0.532	-	-	0.532	-	-	-	-
2009	108-88-3	Toluene	tonnes	1.092	-	-	1.092	-	-	-	-
2008	108-88-3	Toluene	tonnes	0.220	-	-	0.220	-	-	-	-
2007	108-88-3	Toluene	tonnes	1.153	-	-	1.153	-	-	-	-
2006	108-88-3	Toluene	tonnes	1.058	-	-	1.058	-	-	-	-
2005	108-88-3	Toluene	tonnes	1.084	-	-	1.084	-	-	-	-
2004	108-88-3	Toluene	tonnes	1.100	-	-	1.100	-	-	-	-
2003	108-88-3	Toluene	tonnes	1.000	-	-	1.000	-	-	-	-
2024	NA - M08	Total particulate matter	tonnes	169.222	-	-	169.222	-	-	-	-
2023	NA - M08	Total particulate matter	tonnes	146.247	-	-	146.247	-	-	-	-
2021	NA - M08	Total particulate matter	tonnes	184.857	-	-	184.857	-	-	-	-
2020	NA - M08	Total particulate matter	tonnes	131.756	-	-	131.756	-	-	-	-
2019	NA - M08	Total particulate matter	tonnes	129.985	-	-	129.985	-	-	-	-
2018	NA - M08	Total particulate matter	tonnes	93.824	-	-	93.824	-	-	-	-
2017	NA - M08	Total particulate matter	tonnes	161.068	-	-	161.068	-	-	-	-
2016	NA - M08	Total particulate matter	tonnes	125.399	-	-	125.399	-	-	-	-
2015	NA - M08	Total particulate matter	tonnes	244.824	-	-	244.824	-	-	-	-
2014	NA - M08	Total particulate matter	tonnes	195.630	-	-	195.630	-	-	-	-
2013	NA - M08	Total particulate matter	tonnes	104.927	-	-	104.927	-	-	-	-
2012	NA - M08	Total particulate matter	tonnes	55.645	-	-	55.645	-	-	-	-
2011	NA - M08	Total particulate matter	tonnes	152.990	-	-	152.990	-	-	-	-
2010	NA - M08	Total particulate matter	tonnes	155.335	-	-	155.335	-	-	-	-
2009	NA - M08	Total particulate matter	tonnes	166.938	-	-	166.938	-	-	-	-

2008	NA - M08	Total particulate matter	tonnes	162.108	-	-	162.108	-	-	-	-
2007	NA - M08	Total particulate matter	tonnes	223.532	-	-	223.532	-	-	-	-
2006	NA - M08	Total particulate matter	tonnes	221.299	-	-	221.299	-	-	-	-
2005	NA - M08	Total particulate matter	tonnes	166.709	-	-	166.709	-	-	-	-
2004	NA - M08	Total particulate matter	tonnes	289.498	-	-	289.498	-	-	-	-
2003	NA - M08	Total particulate matter	tonnes	285.869	-	-	285.869	-	-	-	-
2002	NA - M08	Total particulate matter	tonnes	285.869	-	-	285.869	-	-	-	-
2024	NA - M14	Total reduced sulphur (expressed as hydrogen sulphide)	tonnes	11.602	-	-	11.602	-	-	-	-
2023	NA - M14	Total reduced sulphur (expressed as hydrogen sulphide)	tonnes	16.339	-	-	16.339	-	-	-	-
2021	NA - M14	Total reduced sulphur (expressed as hydrogen sulphide)	tonnes	12.133	-	-	12.133	-	-	-	-
2020	NA - M14	Total reduced sulphur (expressed as hydrogen sulphide)	tonnes	11.832	-	-	11.832	-	-	-	-
2019	NA - M14	Total reduced sulphur (expressed as hydrogen sulphide)	tonnes	13.248	-	-	13.248	-	-	-	-
2018	NA - M14	Total reduced sulphur (expressed as hydrogen sulphide)	tonnes	16.505	-	-	16.505	-	-	-	-
2017	NA - M14	Total reduced sulphur (expressed as hydrogen sulphide)	tonnes	18.701	-	-	18.701	-	-	-	-
2016	NA - M14	Total reduced sulphur (expressed as hydrogen sulphide)	tonnes	19.070	-	-	19.070	-	-	-	-
2015	NA - M14	Total reduced sulphur (expressed as hydrogen sulphide)	tonnes	17.136	-	-	17.136	-	-	-	-
2014	NA - M14	Total reduced sulphur (expressed as hydrogen sulphide)	tonnes	18.238	-	-	18.238	-	-	-	-
2013	NA - M14	Total reduced sulphur (expressed as hydrogen sulphide)	tonnes	20.515	-	-	20.515	-	-	-	-
2012	NA - M14	Total reduced sulphur (expressed as hydrogen sulphide)	tonnes	23.732	-	-	23.732	-	-	-	-

2012	NA - M14	sulphur (expressed as hydrogen sulphide)	tonnes	23.732	-	-	23.732	-	-	-	-
2011	NA - M14	Total reduced sulphur (expressed as hydrogen sulphide)	tonnes	21.506	-	-	21.506	-	-	-	-
2010	NA - M14	Total reduced sulphur (expressed as hydrogen sulphide)	tonnes	23.788	-	-	23.788	-	-	-	-
2009	NA - M14	Total reduced sulphur (expressed as hydrogen sulphide)	tonnes	21.954	-	-	21.954	-	-	-	-
2008	NA - M14	Total reduced sulphur (expressed as hydrogen sulphide)	tonnes	18.097	-	-	18.097	-	-	-	-
2007	NA - M14	Total reduced sulphur (expressed as hydrogen sulphide)	tonnes	37.290	-	-	37.290	-	-	-	-
2024	NA - M16	Volatile Organic Compounds (Total)	tonnes	226.654	-	-	226.654	-	-	-	-
2023	NA - M16	Volatile Organic Compounds (Total)	tonnes	229.180	-	-	229.180	-	-	-	-
2021	NA - M16	Volatile Organic Compounds (VOCs)	tonnes	234.281	-	-	234.281	-	-	-	-
2020	NA - M16	Volatile Organic Compounds (VOCs)	tonnes	214.296	-	-	214.296	-	-	-	-
2019	NA - M16	Volatile Organic Compounds (VOCs)	tonnes	207.491	-	-	207.491	-	-	-	-
2018	NA - M16	Volatile Organic Compounds (VOCs)	tonnes	195.612	-	-	195.612	-	-	-	-
2017	NA - M16	Volatile Organic Compounds (VOCs)	tonnes	204.937	-	-	204.937	-	-	-	-
2016	NA - M16	Volatile Organic Compounds (VOCs)	tonnes	207.020	-	-	207.020	-	-	-	-
2015	NA - M16	Volatile Organic Compounds (VOCs)	tonnes	243.687	-	-	243.687	-	-	-	-
2014	NA - M16	Volatile Organic Compounds (VOCs)	tonnes	241.215	-	-	241.215	-	-	-	-
2013	NA - M16	Volatile Organic Compounds (VOCs)	tonnes	243.974	-	-	243.974	-	-	-	-
2012	NA - M16	Volatile Organic Compounds (VOCs)	tonnes	240.511	-	-	240.511	-	-	-	-

2011	NA - M16	Volatile Organic Compounds (VOCs)	tonnes	234.176	-	-	234.176	-	-	-	-
2010	NA - M16	Volatile Organic Compounds (VOCs)	tonnes	245.387	-	-	245.387	-	-	-	-
2009	NA - M16	Volatile Organic Compounds (VOCs)	tonnes	236.870	-	-	236.870	-	-	-	-
2008	NA - M16	Volatile Organic Compounds (VOCs)	tonnes	332.942	-	-	332.942	-	-	-	-
2007	NA - M16	Volatile Organic Compounds (VOCs)	tonnes	351.372	-	-	351.372	-	-	-	-
2006	NA - M16	Volatile Organic Compounds (VOCs)	tonnes	342.762	-	-	342.762	-	-	-	-
2005	NA - M16	Volatile Organic Compounds (VOCs)	tonnes	355.601	-	-	355.601	-	-	-	-
2004	NA - M16	Volatile Organic Compounds (VOCs)	tonnes	356.745	-	-	356.745	-	-	-	-
2003	NA - M16	Volatile Organic Compounds (VOCs)	tonnes	349.631	-	-	349.631	-	-	-	-
2002	NA - M16	Volatile Organic Compounds (VOCs)	tonnes	353.995	-	-	353.995	-	-	-	-
2024	NA - 14	Zinc (and its compounds)	tonnes	0.108	2.482	-	2.590	-	-	0.013	8.336
2023	NA - 14	Zinc (and its compounds)	tonnes	0.114	1.714	-	1.828	-	-	0.165	8.668
2021	NA - 14	Zinc (and its compounds)	tonnes	0.112	2.205	-	2.318	-	-	-	8.990
2020	NA - 14	Zinc (and its compounds)	tonnes	0.113	2.016	-	2.129	-	-	-	11.137
2019	NA - 14	Zinc (and its compounds)	tonnes	0.111	1.800	-	1.911	-	-	-	10.452
2018	NA - 14	Zinc (and its compounds)	tonnes	0.108	2.172	-	2.280	-	-	0.002	9.207
2017	NA - 14	Zinc (and its compounds)	tonnes	0.112	2.511	-	2.623	-	-	-	7.907
2016	NA - 14	Zinc (and its compounds)	tonnes	0.114	2.607	-	2.721	-	-	-	10.885
2015	NA - 14	Zinc (and its compounds)	tonnes	0.110	2.319	-	2.429	-	-	-	8.283
2014	NA - 14	Zinc (and its compounds)	tonnes	0.109	2.281	-	2.390	-	-	-	7.950
2013	NA - 14	Zinc (and its compounds)	tonnes	0.110	2.511	-	2.621	-	-	-	11.211
2012	NA - 14	Zinc (and its compounds)	tonnes	0.109	2.339	-	2.448	-	-	-	18.589
2011	NA - 14	Zinc (and its compounds)	tonnes	0.105	3.386	-	3.491	-	-	-	16.745
2010	NA - 14	Zinc (and its compounds)	tonnes	0.113	2.572	-	2.685	3.486	-	-	8.072
2009	NA - 14	Zinc (and its compounds)	tonnes	0.124	3.058	-	3.182	2.030	-	-	6.667
2008	NA - 14	Zinc (and its compounds)	tonnes	0.117	2.091	-	2.208	1.937	-	-	5.056
2007	NA - 14	Zinc (and its compounds)	tonnes	0.129	3.408	-	3.537	2.085	-	-	8.581
2006	NA - 14	Zinc (and its compounds)	tonnes	0.286	3.455	-	3.741	1.963	-	-	7.653

Substance detail

Chlorine dioxide

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	tonnes	6.267615000	M3 - Source Testing

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - On-site use/processing, Process - Reactant, Otherwise Use - Physical or Chemical Processing aid
Reasons for change from previous year	Changes in composition of materials released/disposed of/transferred
Comments on releases	Lower ClO ₂ concentration measured at ClO ₂ vent scrubber, D1/E1 washer hood vent during last stack testing event.
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)

Substance detail

Nitrogen oxides (expressed as nitrogen dioxide)

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	tonnes	931.752783000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Substance detail

Hexachlorobenzene

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	grams	0.000000000	NI - No Information Available

Releases to water

Type	Units	Quantity	Basis of estimate
Direct Discharges	grams		NI - No Information Available
			Receiving waterbody
			Quantity released to waterbody

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)

Comments on disposals
Comments on exclusions in tailing and waste rock

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling
Reasons for change from previous year No Significant Change (i.e. < 0 - 10%)

Substance detail

Pyrene

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	kg	28.506644000	E2 - Published Emission Factors

Releases to water

Type	Units	Quantity	Basis of estimate
Direct Discharges	kg	1.326363000	E2 - Published Emission Factors
			Receiving waterbody Saint John River
			Quantity released to waterbody 1.326363000

Additional information

Contextual information

Nature of activities related to the substance
Reasons for change from previous year
Comments on releases
Comments on releases to land – other

Manufacture - By-Product
No Significant Change (i.e. < 0 - 10%)

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal
Reasons for change from previous year No Significant Change (i.e. < 0 - 10%)

Comments on disposals

Comments on exclusions in tailing and waste rock

Transfers for off-site recycling

Type	Units	Quantity	Basis of estimate	Receiving facility	Quantity transferred
Recovery of Pollution Abatement Residues	kg	1.329461000	E2 - Published Emission Factors	Amanda Tingley,4774 Route 895,Colpitts Settlement	0.016857000
				Amy Higgins,273 Meenans Cove Road,Quispamsis	0.008429000
				Anthony Habraken□,119 Waterford Rd□,Dutch Valley□□	0.012643000
				Betty Floyd,676 Riverview Drive,East Apohaqui	0.016857000
				Bob Bates□,1222 Rte 850□,Kiersteadville□□	0.016857000
				Bob Gray□,191 Ravine Road□,Norton□□	0.016857000
				Brian Walker□,837 Route 880□,Lower Millstream□□	0.025286000
				Caleb Allen,4931 Rte 111,Hillsdale	0.004214000
				Clarendon Compost Facility,7849 Route 101 Hwy,Clarendon	0.246391000
				Cody Carmichael,518 Searletown Rd,Albany	0.021071000
				Daan Kalverboer,2442 Route 121,Apohaqui	0.057595000
				Dave Hansen,1375 Route 860,Smithtown	0.004214000
				Don Bostwick□,36 Boswick Road□,Kingston□□	0.016857000
				Ed Martin□,7139 Rte 102□,Browns Flat□□	0.016857000
				Eric Walker□,6762 New Line Road□,Sussex□□	0.050571000
				Evan Parlee,110 Mcfarlane road,Waterford	0.029500000
				Evelyn Martin□,3427 Route 710□,Henderson Settlement□□	0.012643000
				Frank van der Laan□,36 Vanderlaan Lane□,Norton□□	0.084285000
				Geoff Giffin,95 Highway 6,Amherst	0.012643000
				Gerard Verhoeven□,135 Pulmweseep□,Sussex□□	0.042143000
				Graham Lutz,5198 Rte 115 (delivery location),Keys Mills	0.016857000
				Harold Crowe,287 Route 890,Smiths Creek	0.004214000
				Jacob Wesselius□,850 Wheaton Settlement	0.042143000

Type	Units	Quantity	Basis of estimate		
Recovery of Pollution Abatement Residues	kg	1.329461000	E2 - Published Emission Factors	Road□,Wheaton Settlement□□	0.042143000
				Jeffery Swan,134 Patterson Road,Manners Sutton Parish	0.004214000
				Jim McEwen□,529 Robinson Road□,Salt Springs□□	0.008429000
				Jim Walker□,557 Millbrook Road□,Newline□□	0.029500000
				John Schenkels,992 Route 425,Whitney	0.063214000
				John Wesselius ,529 Scott Road,Salisbury	0.070238000
				Joseph Steeves,1627 Route 895,Elgin	0.004214000
				Kevin Cole,40 Grove Hill Road,Grove Hill	0.004214000
				Kevin or Brent Dunfield,2616 Route 890,Cornhill	0.012643000
				Lee Sharp,1302 Route 875,Lower Millstream	0.021071000
				Lonnie Hunter□,48 Shore Rd□,Bains Corner□□	0.007024000
				LP Consulting (Lise LeBlanc),9768 NS-4,Oxford	0.004214000
				Luc Cormier,875 Route 860,Hampton Parish	0.008429000
				Nancy Colpitts,2670 Route 705,Shannon	0.042143000
				Norbert Heldberg,162 Mannhurst Road,Mannhurst	0.016857000
				Peter McCre□,2635 Rte 705□,Shannon□□	0.012643000
				Ray Folkins,92 Route 870,Kierstead Mountain	0.012643000
				Reid Cleghorn,1158 Tweedside Rd,Harvey	0.033714000
				Scott Robinson□,117 Upper Ward's Creek Rd□,Sussex□□	0.054786000
				Shawn Moffat ,119 Lester Road,Searsville	0.012643000
				Stanford Melvin,2558 Route 890,Cornhill	0.008429000
				Steven McFarlene,102 Creek Road,Waterford	0.004214000
				Ted Wiggans□,149 Frog Lake Rd□,Harvey Station□□	0.008429000
				Thomas Friars,158 Marshall Hill Road,Sussex	0.029500000
				Tim Cater,2700 Lower Cambridge Road,Cambridge Narrows	0.016857000
				Wayne Morgan□,186 Bryson Rd□,Take Rusagonis□□	0.008429000
				Willard Folkins□,5 Folkins Lane□,Mount Middleton□□	0.008429000
				Vaughn Sherwood,2513 Route	0.042143000

Type	Units	Quantity	Basis of estimate		
Recovery of Pollution	kg	1.329461000	E2 - Published Emission	820,Upperton	0.042143000
Abatement Residues			Factors	Justin Lapoint,3200 Route 124,Kars	0.004214000

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	Pollution abatement residues
Reasons for change from previous year	Other (specify in comments field)

Substance detail

Dibenzo[a,i]pyrene

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	No emission factors available for air releases or effluent
Comments on releases to land – other	

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)

Substance detail

Benzo[ghi]perylene

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	kg	0.404458000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Transfers for off-site recycling

Type	Units	Quantity	Basis of estimate	Receiving facility	Quantity transferred
Recovery of Pollution	kg	0.580132000	E2 - Published Emission Factors	Vaughn	0.004597000
Abatement Residues				Sherwood,2513 Route 820,Upperton	
				Amanda Tingley,4774 Route 895,Colpitts Settlement	0.001839000
				Amy Higgins,273 Meenans Cove Road,Quispamsis	0.000919000
				Anthony Habraken□,119 Waterford Rd□,Dutch Valley□□	0.001379000
				Betty Floyd,676 Riverview Drive,East Apohaqui	0.001839000
				Bob Bates□,1222 Rte 850□,Kiersteadville□	0.001839000
				Bob Gray□,191 Ravine Road□,Norton□□	0.001839000
				Brian Walker□,837 Route 880□,Lower Millstream□□	0.002758000
				Caleb Allen,4931 Rte 111,Hillsdale	0.000460000

Type	Units	Quantity	Basis of estimate		
Recovery of Pollution Abatement Residues	kg	0.580132000	E2 - Published Emission Factors	Clarendon Compost Facility,7849 Route 101 Hwy,Clarendon Cody Carmichael,518 Searletown Rd,Albany Daan Kalverboer,2442 Route 121,Apohaqui Dave Hansen,1375 Route 860,Smithtown Don Bostwick□,36 Boswick Road□,Kingston□□ Ed Martin□,7139 Rte 102□,Browns Flat□□ Eric Walker□,6762 New Line Road□,Sussex□□ Evan Parlee,110 Mcfarlane road,Waterford Evelyn Martin□,3427 Route 710□,Henderson Settlement□□ Frank van der Laan□,36 Vanderlaan Lane□,Norton□□ Geoff Giffin,95 Highway 6,Amherst Gerard Verhoeven□,135 Pulmweseep□,Sussex □□ Graham Lutz,5198 Rte 115 (delivery location),Keys Mills Harold Crowe,287 Route 890,Smiths Creek Jacob Wesselius□,850 Wheaton Settlement Road□,Wheaton Settlement□□ Jeffery Swan,134 Patterson Road,Manners Sutton Parish Jim McEwen□,529 Robinson Road□,Salt Springs□□ Jim Walker□,557 Millbrook Road□,Newline□□ John Schenkels,992 Route 425,Whitney John Wesselius ,529 Scott Road,Salisbury Joseph Steeves,1627 Route 895,Elgin Justin LaPointe,60 Baseline Road,Kars Kevin or Brent Dunfield,2616 Route 890,Cornhill Lee Sharp,1302 Route 875,Lower Millstream Lonnie Hunter□,48 Shore Rd□,Bains Corner□□ LP Consulting (Lise LeBlanc),9768 NS-4,Oxford Luc Cormier,875 Route 860,Hampton	0.461983000 0.002299000 0.006283000 0.000460000 0.001839000 0.001839000 0.005517000 0.003218000 0.001379000 0.009195000 0.001379000 0.004597000 0.001839000 0.000460000 0.004597000 0.000460000 0.000919000 0.003218000 0.006896000 0.007662000 0.000460000 0.000460000 0.001379000 0.002299000 0.000766000 0.000460000 0.000919000

Type	Units	Quantity	Basis of estimate		
Recovery of Pollution Abatement Residues	kg	0.580132000	E2 - Published Emission Factors	Parish	0.000919000
				Nancy Colpitts,2670 Route 705,Shannon	0.004597000
				Norbert Heldberg,162 Mannhurst Road,Mannhurst	0.001839000
				Peter McCreagh,2635 Rte 705,Shannon	0.001379000
				Ray Folkins,92 Route 870,Kierstead Mountain	0.001379000
				Reid Cleghorn,1158 Tweedside Rd,Harvey	0.003678000
				Scott Robinson,117 Upper Ward's Creek Rd,Sussex	0.005977000
				Shawn Moffat,119 Lester Road,Searsville	0.001379000
				Stanford Melvin,2558 Route 890,Cornhill	0.000919000
				Steven McFarlane,102 Creek Road,Waterford	0.000460000
				Ted Wiggans,149 Frog Lake Rd,Harvey Station	0.000919000
				Thomas Friars,158 Marshall Hill Road,Sussex	0.003218000
				Tim Cater,2700 Lower Cambridge Road,Cambridge Narrows	0.001839000
				Wayne Morgan,186 Bryson Rd,Take Rusagonis	0.000919000
				Willard Folkins,5 Folkins Lane,Mount Middleton	0.000919000
				Kevin Cole,40 Grove Hill Road,Grove Hill	0.000460000

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	Pollution abatement residues
Reasons for change from previous year	Other (specify in comments field)

Substance detail

Benzo[e]pyrene

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	kg	0.246621000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)

Substance detail

Indeno[1,2,3-cd]pyrene

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	kg	0.408610000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Transfers for off-site recycling

Type	Units	Quantity	Basis of estimate	Receiving facility	Quantity transferred
Recovery of Pollution Abatement Residues	kg	0.091900000	E2 - Published Emission Factors	Vaughn	0.003576000
				Sherwood,2513 Route 820,Upperton	
				Amanda Tingley,4774 Route 895,Colpitts Settlement	0.001430000
				Amy Higgins,273 Meenans Cove Road,Quispamsis	0.000715000
				Anthony Habraken□,119 Waterford Rd□,Dutch Valley□□	0.001073000
				Betty Floyd,676 Riverview Drive,East Apohaqui	0.001430000
				Bob Bates□,1222 Rte 850□,Kiersteadville□□	0.001430000
				Bob Gray□,191 Ravine Road□,Norton□□	0.001430000
				Brian Walker□,837 Route 880□,Lower Millstream□□	0.002145000
				Caleb Allen,4931 Rte 111,Hillsdale	0.000358000
				Clarendon Compost Facility,7849 Route 101 Hwy,Clarendon	0.000000000
				Cody Carmichael,518 Searletown Rd,Albany	0.001788000
				Daan Kalverboer,2442 Route 121,Apohaqui	0.004887000
				Dave Hansen,1375 Route 860,Smithtown	0.000358000
				Don Bostwick□,36 Boswick Road□,Kingston□□	0.001430000
				Ed Martin□,7139 Rte 102□,Browns Flat□□	0.001430000
				Eric Walker□,6762 New Line Road□,Sussex□□	0.004291000
				Evan Parlee,110 Mcfarlane road,Waterford	0.002503000

Type	Units	Quantity	Basis of estimate	
Recovery of Pollution Abatement Residues	kg	0.091900000	E2 - Published Emission Factors	Evelyn Martin□,3427 0.001073000 Route 710□,Henderson Settlement□□ Frank van der Laan□,36 Vanderlaan Lane□,Norton□□ 0.007151000 Geoff Giffin,95 Highway 6,Amherst 0.001073000 Gerard Verhoeven□,135 Pulmweseep□,Sussex □□ 0.003576000 Graham Lutz,5198 Rte 115 (delivery location),Keys Mills 0.001430000 Harold Crowe,287 Route 890,Smiths Creek 0.000358000 Jacob Wesselius□,850 Wheaton Settlement Road□,Wheaton Settlement□□ 0.003576000 Jeffery Swan,134 Patterson Road,Manners Sutton Parish 0.000358000 Jim McEwen□,529 Robinson Road□,Salt Springs□□ 0.000715000 Jim Walker□,557 Millbrook Road□,Newline□□ 0.002503000 John Schenkels,992 Route 425,Whitney 0.005364000 John Wesselius ,529 Scott Road,Salisbury 0.005960000 Joseph Steeves,1627 Route 895,Elgin 0.000358000 Justin LaPointe,60 Baseline Road,Kars 0.000358000 Kevin Cole,40 Grove Hill Road,Grove Hill 0.000358000 Kevin or Brent Dunfield,2616 Route 890,Cornhill 0.001073000 Lee Sharp,1302 Route 875,Lower Millstream 0.001788000 Lonnie Hunter□,48 Shore Rd□,Bains Corner□□ 0.000596000 LP Consulting (Lise LeBlanc),9768 NS-4,Oxford 0.000358000 Luc Cormier,875 Route 860,Hampton Parish 0.000715000 Nancy Colpitts,2670 Route 705,Shannon 0.003576000 Norbert Heldberg,162 Mannhurst Road,Mannhurst 0.001430000 Peter McCrea□,2635 Rte 705□,Shannon□□ 0.001073000 Ray Folkins,92 Route 870,Kierstead Mountain 0.001073000 Reid Cleghorn,1158 Tweedside Rd,Harvey 0.002861000 Scott Robinson□,117 Upper Ward's Creek Rd□,Sussex□□ 0.004648000 Shawn Moffat ,119 Lester Road,Searsville 0.001073000

Type	Units	Quantity	Basis of estimate	
Recovery of Pollution Abatement Residues	kg	0.091900000	E2 - Published Emission Factors	Stanford Melvin,2558 Route 890,Cornhill Steven McFarlene,102 Creek Road,Waterford Ted Wiggans□,149 Frog Lake Rd□,Harvey Station□□ Thomas Friars,158 Marshall Hill Road,Sussex Tim Cater,2700 Lower Cambridge Road,Cambridge Narrows Wayne Morgan□,186 Bryson Rd□,Take Rusagonis□□ Willard Folkins□,5 Folkins Lane□,Mount Middleton□□
				0.000715000 0.000358000 0.000715000 0.002503000 0.001430000 0.000715000 0.000715000

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	Pollution abatement residues
Reasons for change from previous year	Other (specify in comments field)

Substance detail

7H-Dibenzo[c,g]carbazole

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	No emission factors for discharges to air or effluent
Comments on releases to land – other	

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)

Substance detail

Perylene

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	kg	0.028847000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	No emission factor for effluent direct discharges to water
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)

Substance detail

Benzo[j]fluoranthene

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	kg	0.173043000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product
Reasons for change from previous year	Changes in quantity and/or composition of combusted materials or fuels
Comments on releases	More bark burned. No emission factor for effluent releases to water bodies
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)

Substance detail

Benzo[b]fluoranthene

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	kg	0.858150000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Transfers for off-site recycling

Type	Units	Quantity	Basis of estimate	Receiving facility	Quantity transferred
Recovery of Pollution	kg	1.223416000	E2 - Published Emission	Vaughn	0.029628000
Abatement Residues			Factors	Sherwood,2513 Route 820,Upperton Amanda Tingley,4774 Route 895,Colpitts Settlement Amy Higgins,273 Meenans Cove Road,Quispamsis Anthony Habraken□,119 Waterford Rd□,Dutch Valley□□ Betty Floyd,676 Riverview Drive,East Apohaqui Bob Bates□,1222 Rte 850□,Kiersteadville□ □ Bob Gray□,191 Ravine Road□,Norton□□ Brian Walker□,837 Route 880□,Lower Millstream□□ Caleb Allen,4931 Rte 111,Hillsdale Clarendon Compost Facility,7849 Route 101 Hwy,Clarendon	0.011851000 0.005926000 0.008888000 0.011851000 0.011851000 0.011851000 0.011851000 0.017777000 0.002963000 0.461983000

Type	Units	Quantity	Basis of estimate	
Recovery of Pollution Abatement Residues	kg	1.223416000	E2 - Published Emission Factors	Cody Carmichael,518 0.014814000 Searletown Rd,Albany Daan Kalverboer,2442 0.040491000 Route 121,Apohaqui Dave Hansen,1375 0.002963000 Route 860,Smithtown Don Bostwick□,36 0.011851000 Boswick Road□,Kingston□□ Ed Martin□,7139 Rte 0.011851000 102□,Browns Flat□□ Eric Walker□,6762 0.035553000 New Line Road□,Sussex□□ Evan Parlee,110 0.020739000 Mefarlane road,Waterford Evelyn Martin□,3427 0.008888000 Route 710□,Henderson Settlement□□ Frank van der 0.059255000 Laan□,36 Vanderlaan Lane□,Norton□□ Geoff Giffin,95 0.008888000 Highway 6,Amherst Gerard 0.029628000 Verhoeven□,135 Pulmweseep□,Sussex □□ Graham Lutz,5198 Rte 0.011851000 115 (delivery location),Keys Mills Harold Crowe,287 0.002963000 Route 890,Smiths Creek Jacob Wesselius□,850 0.029628000 Wheaton Settlement Road□,Wheaton Settlement□□ Jeffery Swan,134 0.002963000 Patterson Road,Manners Sutton Parish Jim McEwen□,529 0.005926000 Robinson Road□,Salt Springs□□ Jim Walker□,557 0.020739000 Millbrook Road□,Newline□□ John Schenkels,992 0.044441000 Route 425,Whitney John Wesselius ,529 0.049379000 Scott Road,Salisbury Joseph Steeves,1627 0.002963000 Route 895,Elgin Justin LaPointe,60 0.002963000 Baseline Road,Kars Kevin Cole,40 Grove 0.002963000 Hill Road,Grove Hill Kevin or Brent 0.008888000 Dunfield,2616 Route 890,Cornhill Lee Sharp,1302 Route 0.014814000 875,Lower Millstream Lonnie Hunter□,48 0.004938000 Shore Rd□,Bains Corner□□ LP Consulting (Lise 0.002963000 LeBlanc),9768 NS-4,Oxford Luc Cormier,875 0.005926000 Route 860,Hampton Parish

Type	Units	Quantity	Basis of estimate	
Recovery of Pollution Abatement Residues	kg	1.223416000	E2 - Published Emission Factors	Nancy Colpitts,2670 Route 705,Shannon 0.029628000 Norbert Heldberg,162 Mannhurst Road,Mannhurst 0.011851000 Peter McCreary,2635 Rte 705,Shannon 0.008888000 Ray Folkins,92 Route 870,Kierstead Mountain 0.008888000 Reid Cleghorn,1158 Tweedside Rd,Harvey 0.023702000 Scott Robinson,117 Upper Ward's Creek Rd,Sussex 0.038516000 Shawn Moffat,119 Lester Road,Searsville 0.008888000 Stanford Melvin,2558 Route 890,Cornhill 0.005926000 Steven McFarlene,102 Creek Road,Waterford 0.002963000 Ted Wiggans,149 Frog Lake Rd,Harvey Station 0.005926000 Thomas Friars,158 Marshall Hill Road,Sussex 0.020739000 Tim Cater,2700 Lower Cambridge Road,Cambridge Narrows 0.011851000 Wayne Morgan,186 Bryson Rd,Take Rusagonis 0.005926000 Willard Folkins,5 Folkins Lane,Mount Middleton 0.005926000

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	Pollution abatement residues
Reasons for change from previous year	Other (specify in comments field)

Substance detail

Fluoranthene

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	kg	33.886552000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	No emission factor for effluent (releases to water bodies)
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Transfers for off-site recycling

Type	Units	Quantity	Basis of estimate	Receiving facility	Quantity transferred
Recovery of Pollution	kg	1.130511000	E2 - Published Emission	Vaughn	0.033203000
Abatement Residues			Factors	Sherwood,2513 Route 820,Upperton	
				Amanda Tingley,4774 Route 895,Colpitts Settlement	0.013281000
				Amy Higgins,273 Meenans Cove Road,Quispamsis	0.006641000
				Anthony Habracken□,119 Waterford Rd□,Dutch Valley□□	0.009961000
				Betty Floyd,676 Riverview Drive,East Apohaqui	0.013281000
				Bob Bates□,1222 Rte 850□,Kiersteadville□ □	0.013281000
				Bob Gray□,191 Ravine Road□,Norton□□	0.013281000
				Brian Walker□,837 Route 880□,Lower Millstream□□	0.019922000
				Caleb Allen,4931 Rte 111,Hillsdale Clarendon Compost Facility,7849 Route 101 Hwy,Clarendon	0.003320000
				Cody Carmichael,518 Searletown Rd,Albany	0.277190000
				Daan Kalverboer,2442 Route 121,Apohaqui	0.045378000
				Dave Hansen,1375 Route 860,Smithtown	0.003320000
				Don Bostwick□,36 Boswick Road□,Kingston□□	0.013281000
				Ed Martin□,7139 Rte	0.013281000

Type	Units	Quantity	Basis of estimate	
Recovery of Pollution Abatement Residues	kg	1.130511000	E2 - Published Emission Factors	102□, Browns Flat□□ 0.013281000 Eric Walker□, 6762 0.039844000 New Line Road□, Sussex□□ Evan Parlee, 110 0.023242000 McFarlane road, Waterford Evelyn Martin□, 3427 0.009961000 Route 710□, Henderson Settlement□□ Frank van der Laan□, 36 Vanderlaan 0.066407000 Lane□, Norton□□ Geoff Giffin, 95 0.009961000 Highway 6, Amherst Gerard 0.033203000 Verhoeven□, 135 Pulmweseep□, Sussex □□ Graham Lutz, 5198 Rte 0.013281000 115 (delivery location), Keys Mills Harold Crowe, 287 0.003320000 Route 890, Smiths Creek Jacob Wesselius□, 850 0.033203000 Wheaton Settlement Road□, Wheaton Settlement□□ Jeffery Swan, 134 0.003320000 Patterson Road, Manners Sutton Parish Jim McEwen□, 529 0.006641000 Robinson Road□, Salt Springs□□ Jim Walker□, 557 0.023242000 Millbrook Road□, Newline□□ John Schenkels, 992 0.049805000 Route 425, Whitney John Wesselius , 529 0.055339000 Scott Road, Salisbury Joseph Steeves, 1627 0.003320000 Route 895, Elgin Justin LaPointe, 60 0.003320000 Baseline Road, Kars Kevin Cole, 40 Grove 0.003320000 Hill Road, Grove Hill Kevin or Brent 0.009961000 Dunfield, 2616 Route 890, Cornhill Lee Sharp, 1302 Route 0.016602000 875, Lower Millstream Lonnie Hunter□, 48 0.005534000 Shore Rd□, Bains Corner□□ LP Consulting (Lise 0.003320000 LeBlanc), 9768 NS-4, Oxford Luc Cormier, 875 0.006641000 Route 860, Hampton Parish Nancy Colpitts, 2670 0.033203000 Route 705, Shannon Norbert Heldberg, 162 0.013281000 Mannhurst Road, Mannhurst Peter McCrea□, 2635 0.009961000 Rte 705□, Shannon□□ Ray Folkins, 92 Route 0.009961000 870, Kierstead Mountain

Type	Units	Quantity	Basis of estimate
Recovery of Pollution Abatement Residues	kg	1.130511000	E2 - Published Emission Factors
			Reid Cleghorn,1158 0.026563000 Tweedside Rd,Harvey Scott Robinson□,117 0.043164000 Upper Ward's Creek Rd□,Sussex□□ Shawn Moffat ,119 0.009961000 Lester Road,Searsville Stanford Melvin,2558 0.006641000 Route 890,Cornhill Steven McFarlene,102 0.003320000 Creek Road,Waterford Ted Wiggans□,149 0.006641000 Frog Lake Rd□,Harvey Station□□ Thomas Friars,158 0.023242000 Marshall Hill Road,Sussex Tim Cater,2700 Lower 0.013281000 Cambridge Road,Cambridge Narrows Wayne Morgan□,186 0.006641000 Bryson Rd□,Take Rusagonis□□ Willard Folkins□,5 0.006641000 Folkins Lane□,Mount Middleton□□

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	Pollution abatement residues
Reasons for change from previous year	Other (specify in comments field)

Substance detail

Benzo[k]fluoranthene

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	kg	0.597331000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	No emission factors for direct discharges/releases to water bodies.
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Transfers for off-site recycling

Type	Units	Quantity	Basis of estimate	Receiving facility	Quantity transferred
Recovery of Pollution Abatement Residues	kg	0.461983000	E2 - Published Emission Factors	Clarendon Compost Facility,7849 Route 101 Hwy,Clarendon	0.461983000

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	Pollution abatement residues
Reasons for change from previous year	Other (specify in comments field)

Substance detail

Acenaphthylene

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	kg	8.505292000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)

Substance detail

Chrysene

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	kg	7.623809000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	No Significant Change (i.e. < 0 - 10%)
Reasons for change from previous year	
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Transfers for off-site recycling

Type	Units	Quantity	Basis of estimate	Receiving facility	Quantity transferred
Recovery of Pollution	kg	0.164108000	E2 - Published Emission	Vaughn	0.006385000
Abatement Residues			Factors	Sherwood,2513 Route 820,Upperton	
				Amanda Tingley,4774 Route 895,Colpitts Settlement	0.002554000
				Amy Higgins,273 Meenans Cove Road,Quispamsis	0.001277000
				Anthony Habracken □,119 Waterford Rd □,Dutch Valley □ □	0.001916000
				Betty Floyd,676 Riverview Drive,East Apohaqui	0.002554000
				Bob Bates □,1222 Rte 850 □,Kiersteadville □ □	0.002554000
				Bob Gray □,191 Ravine Road □,Norton □ □	0.002554000
				Brian Walker □,837 Route 880 □,Lower Millstream □ □	0.003831000
				Caleb Allen,4931 Rte 111,Hillsdale Clarendon Compost Facility,7849 Route 101 Hwy,Clarendon	0.000639000
				Cody Carmichael,518 Searletown Rd,Albany	0.003193000
				Daan Kalverboer,2442 Route 121,Apohaqui	0.008727000
				Dave Hansen,1375 Route 860,Smithtown	0.000639000
				Don Bostwick □,36 Boswick Road □,Kingston □ □	0.002554000
				Ed Martin □,7139 Rte 102 □,Browns Flat □ □	0.002554000
				Eric Walker □,6762 New Line Road □,Sussex □ □	0.007662000
				Evan Parlee,110 Mcfarlane road,Waterford	0.004470000
				Evelyn Martin □,3427 Route 710 □,Henderson Settlement □ □	0.001916000
				Frank van der Laan □,36 Vanderlaan Lane □,Norton □ □	0.012771000
				Geoff Giffin,95 Highway 6,Amherst	0.001916000
				Gerard Verhoeven □,135 Pulmweseep □,Sussex	0.006385000

Type	Units	Quantity	Basis of estimate		
Recovery of Pollution Abatement Residues	kg	0.164108000	E2 - Published Emission Factors	□□	0.006385000
				Graham Lutz,5198 Rte 115 (delivery location),Keys Mills	0.002554000
				Harold Crowe,287 Route 890,Smiths Creek	0.000639000
				Jacob Wesselius□,850 Wheaton Settlement Road□,Wheaton Settlement□□	0.006385000
				Jeffery Swan,134 Patterson Road,Manners Sutton Parish	0.000639000
				Jim McEwen□,529 Robinson Road□,Salt Springs□□	0.001277000
				Jim Walker□,557 Millbrook Road□,Newline□□	0.004470000
				John Schenkels,992 Route 425,Whitney	0.009578000
				John Wesselius ,529 Scott Road,Salisbury	0.010642000
				Joseph Steeves,1627 Route 895,Elgin	0.000639000
				Justin LaPointe,60 Baseline Road,Kars	0.000639000
				Kevin Cole,40 Grove Hill Road,Grove Hill	0.000639000
				Kevin or Brent Dunfield,2616 Route 890,Cornhill	0.001916000
				Lee Sharp,1302 Route 875,Lower Millstream	0.003193000
				Lonnie Hunter□,48 Shore Rd□,Bains Corner□□	0.001064000
				LP Consulting (Lise LeBlanc),9768 NS-4,Oxford	0.000639000
				Luc Cormier,875 Route 860,Hampton Parish	0.001277000
				Nancy Colpitts,2670 Route 705,Shannon	0.006385000
				Norbert Heldberg,162 Mannhurst Road,Mannhurst	0.002554000
				Peter McCre□,2635 Rte 705□,Shannon□□	0.001916000
				Ray Folkins,92 Route 870,Kierstead Mountain	0.001916000
				Reid Cleghorn,1158 Tweedside Rd,Harvey	0.005108000
				Scott Robinson□,117 Upper Ward's Creek Rd□,Sussex□□	0.008301000
				Shawn Moffat ,119 Lester Road,Searsville	0.001916000
				Stanford Melvin,2558 Route 890,Cornhill	0.001277000
				Steven McFarlene,102 Creek Road,Waterford	0.000639000
				Ted Wiggans□,149 Frog Lake Rd□,Harvey Station□□	0.001277000
				Thomas Friars,158 Marshall Hill Road,Sussex	0.004470000
				Tim Cater,2700 Lower	0.002554000

Type	Units	Quantity	Basis of estimate		
Recovery of Pollution Abatement Residues	kg	0.164108000	E2 - Published Emission Factors	Cambridge Road, Cambridge Narrows	0.002554000
				Wayne Morgan □, 186 Bryson Rd □, Take Rusagonis □ □	0.001277000
				Willard Folkins □, 5 Folkins Lane □, Mount Middleton □ □	0.001277000

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	Pollution abatement residues
Reasons for change from previous year	Other (specify in comments field)

Substance detail

Dibenz[a,j]acridine

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	Not detectable in effluent per published emission factors (no emission factor), no emission factors for stack or point releases
Comments on releases to land – other	

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)

Substance detail

Formaldehyde

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	tonnes	3.233932000	E2 - Published Emission Factors

Releases to water

Type	Units	Quantity	Basis of estimate
Direct Discharges	tonnes	2.074313000	M3 - Source Testing
			Receiving waterbody
			Saint John River
			Quantity released to waterbody
			2.074313000

Concentration of the Substance (Waterbody)

Information in Sampling and Detection Limits	Half or more than half of samples above detection limit
Was the quantity reported above estimated using half the detection limit for some or all values?	Yes
Method Detection Limit (ppm)	0.05000000
Average Concentration (ppm)	0.054737
More than one method detection limit applies	No
Concentration Comment(s)	

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product, Process - By-Product
Reasons for change from previous year	Changes in composition of materials released/disposed of/transferred
Comments on releases	Decrease in measured concentration in effluent and fewer operating days compared to 2021
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)

Substance detail

Benzo[a]pyrene

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	kg	3.212651000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product
Reasons for change from previous year	Changes in quantity and/or composition of combusted materials or fuels
Comments on releases	More bark burned
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Transfers for off-site recycling

Type	Units	Quantity	Basis of estimate	Receiving facility	Quantity transferred
Recovery of Pollution Abatement Residues	kg	0.553883000	E2 - Published Emission Factors	Vaughn	0.003576000
				Sherwood,2513 Route 820,Upperton	
				Amanda Tingley,4774 Route 895,Colpitts Settlement	0.001430000
				Amy Higgins,273	0.000715000

Type	Units	Quantity	Basis of estimate		
Recovery of Pollution Abatement Residues	kg	0.553883000	E2 - Published Emission Factors	Meenans Cove Road,Quispamsis Anthony	0.000715000 0.001073000
				Habraken□,119 Waterford Rd□,Dutch Valley□□	
				Betty Floyd,676 Riverview Drive,East Apohaqui	0.001430000
				Bob Bates□,1222 Rte 850□,Kiersteadville□	0.001430000
				Bob Gray□,191 Ravine Road□,Norton□□	0.001430000
				Brian Walker□,837 Route 880□,Lower Millstream□□	0.002145000
				Caleb Allen,4931 Rte 111,Hillsdale	0.000358000
				Clarendon Compost Facility,7849 Route 101 Hwy,Clarendon	0.461983000
				Cody Carmichael,518 Searletown Rd,Albany	0.001788000
				Daan Kalverboer,2442 Route 121,Apohaqui	0.004887000
				Dave Hansen,1375 Route 860,Smithtown	0.000358000
				Don Bostwick□,36 Boswick Road□,Kingston□□	0.001430000
				Ed Martin□,7139 Rte 102□,Browns Flat□□	0.001430000
				Eric Walker□,6762 New Line Road□,Sussex□□	0.004291000
				Evan Parlee,110 Mcfarlane road,Waterford	0.002503000
				Evelyn Martin□,3427 Route 710□,Henderson Settlement□□	0.001073000
				Frank van der Laan□,36 Vanderlaan Lane□,Norton□□	0.007151000
				Geoff Giffin,95 Highway 6,Amherst	0.001073000
				Gerard Verhoeven□,135 Pulmwesee□,Sussex□□	0.003576000
				Graham Lutz,5198 Rte 115 (delivery location),Keys Mills	0.001430000
				Harold Crowe,287 Route 890,Smiths Creek	0.000358000
				Jacob Wesselius□,850 Wheaton Settlement Road□,Wheaton Settlement□□	0.003576000
				Jeffery Swan,134 Patterson Road,Manners Sutton Parish	0.000358000
				Jim McEwen□,529 Robinson Road□,Salt Springs□□	0.000715000
				Jim Walker□,557 Millbrook Road□,Newline□□	0.002503000
				John Schenkels,992	0.005364000

Type	Units	Quantity	Basis of estimate		
Recovery of Pollution Abatement Residues	kg	0.553883000	E2 - Published Emission Factors	Route 425,Whitney	0.005364000
				John Wesseliuss,529	0.005960000
				Scott Road,Salisbury	
				Joseph Steeves,1627	0.000358000
				Route 895,Elgin	
				Justin LaPointe,60	0.000358000
				Baseline Road,Kars	
				Kevin Cole,40 Grove Hill Road,Grove Hill	0.000358000
				Kevin or Brent	0.001073000
				Dunfield,2616 Route 890,Cornhill	
				Lee Sharp,1302 Route 875,Lower Millstream	0.001788000
				Lonnie Hunter□,48	0.000596000
				Shore Rd□,Bains Corner□□	
				LP Consulting (Lise LeBlanc),9768	0.000358000
				NS-4,Oxford	
				Luc Cormier,875	0.000715000
				Route 860,Hampton Parish	
				Nancy Colpitts,2670	0.003576000
				Route 705,Shannon	
				Norbert Heldberg,162	0.001430000
				Mannhurst Road,Mannhurst	
				Peter McCreas□,2635	0.001073000
				Rte 705□,Shannon□□	
				Ray Folkins,92	0.001073000
				Route 870,Kierstead Mountain	
				Reid Cleghorn,1158	0.002861000
				Tweedside Rd,Harvey	
				Scott Robinson□,117	0.004648000
				Upper Ward's Creek Rd□,Sussex□□	
				Shawn Moffat ,119	0.001073000
				Lester Road,Searsville	
				Stanford Melvin,2558	0.000715000
				Route 890,Cornhill	
				Steven McFarlene,102	0.000358000
				Creek Road,Waterford	
				Ted Wiggans□,149	0.000715000
				Frog Lake Rd□,Harvey Station□□	
				Thomas Friars,158	0.002503000
				Marshall Hill Road,Sussex	
				Tim Cater,2700 Lower Cambridge	0.001430000
				Road,Cambridge Narrows	
				Wayne Morgan□,186	0.000715000
				Bryson Rd□,Take Rusagonis□□	
				Willard Folkins□,5	0.000715000
				Folkins Lane□,Mount Middleton□□	

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	Pollution abatement residues
Reasons for change from previous year	Other (specify in comments field)

Substance detail

Dibenz[a,h]anthracene

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	kg	0.286305000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Transfers for off-site recycling

Type	Units	Quantity	Basis of estimate	Receiving facility	Quantity transferred
Recovery of Pollution Abatement Residues	kg	0.573572000	E2 - Published Emission Factors	Vaughn Sherwood,2513 Route 820,Upperton Amanda Tingley,4774 Route 895,Colpitts Settlement Amy Higgins,273 Meenans Cove Road,Quispamsis Anthony Habraken□,119 Waterford Rd□,Dutch Valley□□ Betty Floyd,676 Riverview Drive,East Apohaqui Bob Bates□,1222 Rte	0.004342000 0.001737000 0.000868000 0.001303000 0.001737000 0.001737000

Type	Units	Quantity	Basis of estimate	
Recovery of Pollution Abatement Residues	kg	0.573572000	E2 - Published Emission Factors	850□,Kiersteadville□ 0.001737000
				□
				Bob Gray□,191 0.001737000
				Ravine
				Road□,Norton□□
				Brian Walker□,837 0.002605000
				Route 880□,Lower
				Millstream□□
				Caleb Allen,4931 Rte 0.000434000
				111,Hillsdale
				Clarendon Compost 0.461983000
				Facility,7849 Route
				101 Hwy,Clarendon
				Cody Carmichael,518 0.002171000
				Searletown Rd,Albany
				Daan Kalverboer,2442 0.005934000
				Route 121,Apohaqui
				Dave Hansen,1375 0.000434000
				Route 860,Smithtown
				Don Bostwick□,36 0.001737000
				Boswick
				Road□,Kingston□□
				Ed Martin□,7139 Rte 0.001737000
				102□,Browns Flat□□
				Eric Walker□,6762 0.005210000
				New Line
				Road□,Sussex□□
				Evan Parlee,110 0.003039000
				Mefarlane
				road,Waterford
				Evelyn Martin□,3427 0.001303000
				Route
				710□,Henderson
				Settlement□□
				Frank van der 0.008684000
				Laan□,36 Vanderlaan
				Lane□,Norton□□
				Geoff Giffin,95 0.001303000
				Highway 6,Amherst
				Gerard 0.004342000
				Verhoeven□,135
				Pulmweseep□,Sussex
				□□
				Graham Lutz,5198 Rte 0.001737000
				115 (delivery
				location),Keys Mills
				Harold Crowe,287 0.000434000
				Route 890,Smiths
				Creek
				Jacob Wesselius□,850 0.004342000
				Wheaton Settlement
				Road□,Wheaton
				Settlement□□
				Jeffery Swan,134 0.000434000
				Patterson
				Road,Manners Sutton
				Parish
				Jim McEwen□,529 0.000868000
				Robinson Road□,Salt
				Springs□□
				Jim Walker□,557 0.003039000
				Millbrook
				Road□,Newline□□
				John Schenkels,992 0.006513000
				Route 425,Whitney
				John Wesselius ,529 0.007237000
				Scott Road,Salisbury
				Joseph Steeves,1627 0.000434000
				Route 895,Elgin
				Justin LaPointe,60 0.000434000
				Baseline Road,Kars
				Kevin Cole,40 Grove 0.000434000
				Hill Road,Grove Hill
				Kevin or Brent 0.001303000

Type	Units	Quantity	Basis of estimate	
Recovery of Pollution Abatement Residues	kg	0.573572000	E2 - Published Emission Factors	Dunfield,2616 Route 890,Cornhill 0.001303000 Lee Sharp,1302 Route 875,Lower Millstream 0.002171000 Lonnie Hunter□,48 Shore Rd□,Bains Corner□□ 0.000724000 LP Consulting (Lise LeBlanc),9768 NS-4,Oxford 0.000434000 Luc Cormier,875 Route 860,Hampton Parish 0.000868000 Nancy Colpitts,2670 Route 705,Shannon 0.004342000 Norbert Heldberg,162 Mannhurst Road,Mannhurst 0.001737000 Peter McCreagh□,2635 Rte 705□,Shannon□□ 0.001303000 Ray Folkins,92 Route 870,Kierstead Mountain 0.001303000 Reid Cleghorn,1158 Tweedside Rd,Harvey 0.003474000 Scott Robinson□,117 Upper Ward's Creek Rd□,Sussex□□ 0.005645000 Shawn Moffat ,119 Lester Road,Searsville 0.001303000 Stanford Melvin,2558 Route 890,Cornhill 0.000868000 Steven McFarlene,102 Creek Road,Waterford 0.000434000 Ted Wiggans□,149 Frog Lake Rd□,Harvey Station□□ 0.000868000 Thomas Friars,158 Marshall Hill Road,Sussex 0.003039000 Tim Cater,2700 Lower Cambridge Road,Cambridge Narrows 0.001737000 Wayne Morgan□,186 Bryson Rd□,Take Rusagonis□□ 0.000868000 Willard Folkins□,5 Folkins Lane□,Mount Middleton□□ 0.000868000

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	Pollution abatement residues
Reasons for change from previous year	Other (specify in comments field)

Substance detail

Benz[a]anthracene

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	kg	1.928384000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Transfers for off-site recycling

Type	Units	Quantity	Basis of estimate	Receiving facility	Quantity transferred
Recovery of Pollution	kg	0.626091000	E2 - Published Emission Factors	Vaughn	0.006385000
Abatement Residues				Sherwood,2513 Route 820,Upperton	
				Amanda Tingley,4774 Route 895,Colpitts Settlement	0.002554000
				Amy Higgins,273 Meenans Cove Road,Quispamsis	0.001277000
				Anthony Habraken□,119 Waterford Rd□,Dutch Valley□□	0.001916000
				Betty Floyd,676 Riverview Drive,East Apohaqui	0.002554000
				Bob Bates□,1222 Rte 850□,Kiersteadville□	0.002554000
				Bob Gray□,191 Ravine Road□,Norton□□	0.002554000
				Brian Walker□,837 Route 880□,Lower Millstream□□	0.003831000
				Caleb Allen,4931 Rte 111,Hillsdale	0.000639000

Type	Units	Quantity	Basis of estimate		
Recovery of Pollution Abatement Residues	kg	0.626091000	E2 - Published Emission Factors	Clarendon Compost Facility,7849 Route 101 Hwy,Clarendon Cody Carmichael,518 Searletown Rd,Albany Daan Kalverboer,2442 Route 121,Apohaqui Dave Hansen,1375 Route 860,Smithtown Don Bostwick□,36 Boswick Road□,Kingston□□ Ed Martin□,7139 Rte 102□,Browns Flat□□ Eric Walker□,6762 New Line Road□,Sussex□□ Evan Parlee,110 Mcfarlane road,Waterford Evelyn Martin□,3427 Route 710□,Henderson Settlement□□ Frank van der Laan□,36 Vanderlaan Lane□,Norton□□ Geoff Giffin,95 Highway 6,Amherst Gerard Verhoeven□,135 Pulmweseep□,Sussex □□ Graham Lutz,5198 Rte 115 (delivery location),Keys Mills Jacob Wesselius□,850 Wheaton Settlement Road□,Wheaton Settlement□□ Jeffery Swan,134 Patterson Road,Manners Sutton Parish Jim McEwen□,529 Robinson Road□,Salt Springs□□ Jim Walker□,557 Millbrook Road□,Newline□□ John Schenkels,992 Route 425,Whitney John Wesselius ,529 Scott Road,Salisbury Justin LaPointe,60 Baseline Road,Kars Kevin Cole,40 Grove Hill Road,Grove Hill Kevin or Brent Dunfield,2616 Route 890,Cornhill Lee Sharp,1302 Route 875,Lower Millstream Lonnie Hunter□,48 Shore Rd□,Bains Corner□□ LP Consulting (Lise LeBlanc),9768 NS-4,Oxford Luc Cormier,875 Route 860,Hampton Parish Nancy Colpitts,2670 Route 705,Shannon	0.461983000 0.003193000 0.008727000 0.000639000 0.002554000 0.002554000 0.007662000 0.004470000 0.001916000 0.012771000 0.001916000 0.006385000 0.002554000 0.006385000 0.000639000 0.001277000 0.004470000 0.009578000 0.010642000 0.000639000 0.000639000 0.001916000 0.003193000 0.001064000 0.000639000 0.001277000 0.006385000

Type	Units	Quantity	Basis of estimate	
Recovery of Pollution Abatement Residues	kg	0.626091000	E2 - Published Emission Factors	Norbert Heldberg,162 Mannhurst Road,Mannhurst Peter McCreagh,2635 Rte 705,Shannon Ray Folkins,92 Route 870,Kierstead Mountain Reid Cleghorn,1158 Tweedside Rd,Harvey Scott Robinson,117 Upper Ward's Creek Rd,Sussex Shawn Moffat,119 Lester Road,Searsville Stanford Melvin,2558 Route 890,Cornhill Steven McFarlene,102 Creek Road,Waterford Ted Wiggans,149 Frog Lake Rd,Harvey Station Thomas Friars,158 Marshall Hill Road,Sussex Tim Cater,2700 Lower Cambridge Road,Cambridge Narrows Wayne Morgan,186 Bryson Rd,Take Rusagonis Willard Folkins,5 Folkins Lane,Mount Middleton Harold Crowe,287 Route 890,Smiths Creek Joseph Steeves,1627 Route 895,Elgin

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	Pollution abatement residues
Reasons for change from previous year	Other (specify in comments field)

Substance detail

Carbon monoxide

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	tonnes	2069.142413000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Substance detail

Methanol

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	tonnes	81.170904000	E2 - Published Emission Factors

Releases to water

Type	Units	Quantity	Basis of estimate
Direct Discharges	tonnes	25.069727000	M3 - Source Testing
			Receiving waterbody
			Saint John River
			Quantity released to waterbody
			25.069727000

Concentration of the Substance (Waterbody)

Information in Sampling and Detection Limits	Less than half of samples above detection limit
Was the quantity reported above estimated using half the detection limit for some or all values?	Yes
Method Detection Limit (ppm)	1.00000000
Average Concentration (ppm)	0.661538
More than one method detection limit applies	No
Concentration Comment(s)	

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product,Process - Reactant,Otherwise Use - Physical or Chemical Processing aid,Otherwise Use - Manufacturing Aid
Reasons for change from previous year	Changes in composition of materials released/disposed of/transferred
Comments on releases	Lower measured concentration in effluent
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)

Substance detail

Sulphur dioxide

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	tonnes	491.326370000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Substance detail

Sulphuric acid

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	tonnes	1.845462000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - On-site use/processing,Process - Reactant,Otherwise Use - Physical or Chemical Processing aid
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	MPO greater than threshold, therefore required to report releases.
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)

Substance detail

Acenaphthene

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	kg	1.104683000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product
Reasons for change from previous year	Changes in quantity and/or composition of combusted materials or fuels
Comments on releases	More bark, heavy fuel oil and natural gas burned
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)

Substance detail

Phenanthrene

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	kg	112.848395000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Transfers for off-site recycling

Type	Units	Quantity	Basis of estimate	Receiving facility	Quantity transferred
Recovery of Pollution	kg	4.902735000	E2 - Published Emission	Vaughn	0.116467000
Abatement Residues			Factors	Sherwood,2513 Route 820,Upperton	
				Amanda Tingley,4774 Route 895,Colpitts Settlement	0.046587000
				Amy Higgins,273 Meenans Cove Road,Quispamsis	0.023293000
				Anthony Habracken□,119 Waterford Rd□,Dutch Valley□□	0.034940000
				Betty Floyd,676 Riverview Drive,East Apohaqui	0.046587000
				Bob Bates□,1222 Rte 850□,Kiersteadville□ □	0.046587000
				Bob Gray□,191 Ravine Road□,Norton□□	0.046587000
				Brian Walker□,837 Route 880□,Lower Millstream□□	0.069880000
				Caleb Allen,4931 Rte 111,Hillsdale Clarendon Compost Facility,7849 Route 101 Hwy,Clarendon	0.011647000
				Cody Carmichael,518 Searletown Rd,Albany	0.058234000
				Daan Kalverboer,2442 Route 121,Apohaqui	0.159172000
				Dave Hansen,1375 Route 860,Smithtown	0.011647000
				Don Bostwick□,36 Boswick Road□,Kingston□□	0.046587000
				Ed Martin□,7139 Rte 102□,Browns Flat□□	0.046587000
				Eric Walker□,6762 New Line Road□,Sussex□□	0.139761000
				Evan Parlee,110 Mcfarlane road,Waterford	0.081527000
				Evelyn Martin□,3427 Route 710□,Henderson Settlement□□	0.034940000
				Frank van der Laan□,36 Vanderlaan Lane□,Norton□□	0.232934000
				Geoff Giffin,95 Highway 6,Amherst	0.034940000
				Gerard Verhoeven□,135 Pulmweseep□,Sussex	0.116467000

Type	Units	Quantity	Basis of estimate		
Recovery of Pollution Abatement Residues	kg	4.902735000	E2 - Published Emission Factors	□□	0.116467000
				Graham Lutz,5198 Rte 115 (delivery location),Keys Mills	0.046587000
				Harold Crowe,287 Route 890,Smiths Creek	0.011647000
				Jacob Wesselius□,850 Wheaton Settlement Road□,Wheaton Settlement□□	0.116467000
				Jeffery Swan,134 Patterson Road,Manners Sutton Parish	0.011647000
				Jim McEwen□,529 Robinson Road□,Salt Springs□□	0.023293000
				Jim Walker□,557 Millbrook Road□,Newline□□	0.081527000
				John Schenkels,992 Route 425,Whitney	0.174701000
				John Wesselius ,529 Scott Road,Salisbury	0.194112000
				Joseph Steeves,1627 Route 895,Elgin	0.011647000
				Justin LaPointe,60 Baseline Road,Kars	0.011647000
				Kevin Cole,40 Grove Hill Road,Grove Hill	0.011647000
				Kevin or Brent Dunfield,2616 Route 890,Cornhill	0.034940000
				Lee Sharp,1302 Route 875,Lower Millstream	0.058234000
				Lonnie Hunter□,48 Shore Rd□,Bains Corner□□	0.019411000
				LP Consulting (Lise LeBlanc),9768 NS-4,Oxford	0.011647000
				Luc Cormier,875 Route 860,Hampton Parish	0.023293000
				Nancy Colpitts,2670 Route 705,Shannon	0.116467000
				Norbert Heldberg,162 Mannhurst Road,Mannhurst	0.046587000
				Peter McCre□,2635 Rte 705□,Shannon□□	0.034940000
				Ray Folkins,92 Route 870,Kierstead Mountain	0.034940000
				Reid Cleghorn,1158 Tweedside Rd,Harvey	0.093174000
				Scott Robinson□,117 Upper Ward's Creek Rd□,Sussex□□	0.151407000
				Shawn Moffat ,119 Lester Road,Searsville	0.034940000
				Stanford Melvin,2558 Route 890,Cornhill	0.023293000
				Steven McFarlene,102 Creek Road,Waterford	0.011647000
				Ted Wiggans□,149 Frog Lake Rd□,Harvey Station□□	0.023293000
				Thomas Friars,158 Marshall Hill Road,Sussex	0.081527000
				Tim Cater,2700 Lower	0.046587000

Type	Units	Quantity	Basis of estimate		
Recovery of Pollution Abatement Residues	kg	4.902735000	E2 - Published Emission Factors	Cambridge Road, Cambridge Narrows	0.046587000
				Wayne Morgan □, 186 Bryson Rd □, Take Rusagonis □ □	0.023293000
				Willard Folkins □, 5 Folkins Lane □, Mount Middleton □ □	0.023293000

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	Pollution abatement residues
Reasons for change from previous year	Other (specify in comments field)

Substance detail

Fluorene

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	kg	4.129550000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product
Reasons for change from previous year	Changes in quantity and/or composition of combusted materials or fuels
Comments on releases	More bark, heavy fuel oil and natural gas burned
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste	

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)

Substance detail

Cadmium (and its compounds)

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	kg	4.131769000	E2 - Published Emission Factors

Releases to water

Type	Units	Quantity	Basis of estimate
Direct Discharges	kg	30.064239000	M3 - Source Testing
			Receiving waterbody
			Saint John River
			Quantity released to waterbody
			30.064239000

Concentration of the Substance (Waterbody)

Information in Sampling and Detection Limits	All samples above detection limit
Was the quantity reported above estimated using half the detection limit for some or all values?	No
Method Detection Limit (ppm)	0.00001000
Average Concentration (ppm)	0.000793
More than one method detection limit applies	No
Concentration Comment(s)	

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product,Manufacture - Impurity,Process - By-Product,Otherwise Use - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000

Q3

25.000000

Q4

25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Transfers for off-site recycling

Type	Units	Quantity	Basis of estimate	Receiving facility	Quantity transferred
Recovery of Pollution Abatement Residues	kg	75.682045000	M3 - Source Testing	Vaughn Sherwood,2513 Route 820,Upperton Amanda Tingley,4774 Route 895,Colpitts Settlement Amy Higgins,273 Meenans Cove Road,Quispamsis Anthony Habracken□,119 Waterford Rd□,Dutch Valley□□ Betty Floyd,676 Riverview Drive,East Apohaqui Bob Bates□,1222 Rte 850□,Kiersteadville□ □ Bob Gray□,191 Ravine Road□,Norton□□ Brian Walker□,837 Route 880□,Lower Millstream□□ Caleb Allen,4931 Rte 111,Hillsdale Clarendon Compost Facility,7849 Route 101 Hwy,Clarendon Cody Carmichael,518 Searletown Rd,Albany Daan Kalverboer,2442 Route 121,Apohaqui Dave Hansen,1375 Route 860,Smithtown Don Bostwick□,36 Boswick Road□,Kingston□□ Ed Martin□,7139 Rte 102□,Browns Flat□□ Envirem Organics Inc.,122 Killarney Road,Fredericton Envirem Organics Inc.,325 Perimeter Rd,Miramichi Eric Walker□,6762 New Line Road□,Sussex□□ Evan Parlee,110 Mcfarlane road,Waterford	1.782765000 0.713106000 0.356553000 0.534830000 0.713106000 0.713106000 0.713106000 1.069659000 0.178277000 1.349811000 0.891383000 2.436446000 0.178277000 0.713106000 22.099248000 6.415910000 2.139319000 1.247936000

Type	Units	Quantity	Basis of estimate	
Recovery of Pollution Abatement Residues	kg	75.682045000	M3 - Source Testing	Evelyn Martin□,3427 0.534830000 Route 710□,Henderson Settlement□□ Frank van der Laan□,36 Vanderlaan Lane□,Norton□□ 3.565531000 Gerard 1.782765000 Verhoeven□,135 Pulmweseep□,Sussex □□ Graham Lutz,5198 Rte 115 (delivery location),Keys Mills 0.713106000 Harold Crowe,287 Route 890,Smiths Creek 0.178277000 Jacob Wesselius□,850 Wheaton Settlement Road□,Wheaton Settlement□□ 1.782765000 Jeffery Swan,134 Patterson Road,Manners Sutton Parish 0.178277000 Jim McEwen□,529 Robinson Road□,Salt Springs□□ 0.356553000 Jim Walker□,557 Millbrook Road□,Newline□□ 1.247936000 John Schenkels,992 Route 425,Whitney 2.674148000 John Wesselius ,529 Scott Road,Salisbury 2.971276000 Joseph Steeves,1627 Route 895,Elgin 0.178277000 Justin LaPointe,60 Baseline Road,Kars 0.178277000 Kevin Cole,40 Grove Hill Road,Grove Hill 0.178277000 Kevin or Brent Dunfield,2616 Route 890,Cornhill 0.534830000 Lee Sharp,1302 Route 875,Lower Millstream 0.891383000 Lonnie Hunter□,48 Shore Rd□,Bains Corner□□ 0.297128000 LP Consulting (Lise LeBlanc),9768 NS-4,Oxford 0.178277000 Luc Cormier,875 Route 860,Hampton Parish 0.356553000 Nancy Colpitts,2670 Route 705,Shannon 1.782765000 Norbert Heldberg,162 Mannhurst Road,Mannhurst 0.713106000 Peter McCrea□,2635 Rte 705□,Shannon□□ 0.534830000 Ray Folkins,92 Route 870,Kierstead Mountain 0.534830000 Reid Cleghorn,1158 Tweedside Rd,Harvey 1.426212000 Scott Robinson□,117 Upper Ward's Creek Rd□,Sussex□□ 2.317595000 Shawn Moffat ,119 Lester Road,Searsville 0.534830000 Stanford Melvin,2558 Route 890,Cornhill 0.356553000

Type	Units	Quantity	Basis of estimate	
Recovery of Pollution Abatement Residues	kg	75.682045000	M3 - Source Testing	Steven McFarlene,102 0.178277000 Creek Road,Waterford Ted Wiggans□,149 0.356553000 Frog Lake Rd□,Harvey Station□□ Thomas Friars,158 1.247936000 Marshall Hill Road,Sussex Tim Cater,2700 Lower 0.713106000 Cambridge Road,Cambridge Narrows Wayne Morgan□,186 0.356553000 Bryson Rd□,Take Rusagonis□□ Willard Folkins□,5 0.356553000 Folkins Lane□,Mount Middleton□□ Geoff Giffin,95 0.534830000 Highway 6,Amherst

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	Pollution abatement residues
Reasons for change from previous year	Changes in composition of materials released/disposed of/transferred

Substance detail

Cobalt (and its compounds)

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	kg	3.981802000	E2 - Published Emission Factors

Releases to water

Type	Units	Quantity	Basis of estimate	
Direct Discharges	kg	2.052705000	M3 - Source Testing	Receiving waterbody Quantity released to waterbody Saint John River 2.052705000

Concentration of the Substance (Waterbody)

Information in Sampling and Detection Limits	Less than half of samples above detection limit
Was the quantity reported above estimated using half the detection limit for some or all values?	Yes
Method Detection Limit (ppm)	0.00010000
Average Concentration (ppm)	0.054167
More than one method detection limit applies	No
Concentration Comment(s)	

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product,Process - By-Product,Otherwise Use - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	Other
Reasons for change from previous year	Activities/events of a non-annual nature (e.g. a spill, tailings pond breach, or fire).
Comments on disposals	Recovery boiler underwent an acid wash in 2021. Materials generated through the acid wash were collected and sent offsite for disposal/treatment. There was no acid wash of the Recovery Boiler in 2021.
Comments on exclusions in tailing and waste rock	

Transfers for off-site recycling

Type	Units	Quantity	Basis of estimate	Receiving facility	Quantity transferred
Recovery of Pollution Abatement Residues	kg	89.829259000	M3 - Source Testing	Vaughn	1.894682000
				Sherwood,2513 Route 820,Upperton	
				Amanda Tingley,4774 Route 895,Colpitts Settlement	0.757873000
				Amy Higgins,273 Meenans Cove Road,Quispamsis	
				Anthony Habraken□,119 Waterford Rd□,Dutch Valley□□	0.568405000
				Betty Floyd,676 Riverview Drive,East Apohaqui	0.757873000
				Bob Bates□,1222 Rte 850□,Kiersteadville□□	0.757873000
				Bob Gray□,191 Ravine Road□,Norton□□	0.757873000
				Brian Walker□,837 Route 880□,Lower Millstream□□	1.136809000
				Caleb Allen,4931 Rte 111,Hillsdale	0.189468000
				Clarendon Compost Facility,7849 Route 101 Hwy,Clarendon	21.368993000
				Cody Carmichael,518 Searletown Rd,Albany	0.947341000

Type	Units	Quantity	Basis of estimate	
Recovery of Pollution Abatement Residues	kg	89.829259000	M3 - Source Testing	Daan Kalverboer,2442 2.589398000 Route 121,Apohaqui Dave Hansen,1375 0.189468000 Route 860,Smithtown Don Bostwick□,36 0.757873000 Boswick Road□,Kingston□□ Ed Martin□,7139 Rte 0.757873000 102□,Browns Flat□□ Envirem Organics 15.319384000 Inc.,122 Killarney Road,Fredericton Envirem Organics 4.447560000 Inc.,325 Perimeter Rd,Miramichi Eric Walker□,6762 2.273618000 New Line Road□,Sussex□□ Evan Parlee,110 1.326277000 Mcfarlane road,Waterford Evelyn Martin□,3427 0.568405000 Route 710□,Henderson Settlement□□ Frank van der 3.789363000 Laan□,36 Vanderlaan Lane□,Norton□□ Geoff Giffin,95 0.568405000 Highway 6,Amherst Gerard 1.894682000 Verhoeven□,135 Pulmweseep□,Sussex □□ Graham Lutz,5198 Rte 0.757873000 115 (delivery location),Keys Mills Harold Crowe,287 0.189468000 Route 890,Smiths Creek Jacob Wesselius□,850 1.894682000 Wheaton Settlement Road□,Wheaton Settlement□□ Jeffery Swan,134 0.189468000 Patterson Road,Manners Sutton Parish Jim McEwen□,529 0.378936000 Robinson Road□,Salt Springs□□ Jim Walker□,557 1.326277000 Millbrook Road□,Newline□□ John Schenkels,992 2.842023000 Route 425,Whitney John Wesselius ,529 3.157803000 Scott Road,Salisbury Joseph Steeves,1627 0.189468000 Route 895,Elgin Justin LaPointe,60 0.189468000 Baseline Road,Kars Kevin Cole,40 Grove 0.189468000 Hill Road,Grove Hill Kevin or Brent 0.568405000 Dunfield,2616 Route 890,Cornhill Lee Sharp,1302 Route 0.947341000 875,Lower Millstream Lonnie Hunter□,48 0.315780000 Shore Rd□,Bains Corner□□ LP Consulting (Lise 0.189468000 LeBlanc),9768

Type	Units	Quantity	Basis of estimate		
Recovery of Pollution	kg	89.829259000	M3 - Source Testing	NS-4,Oxford	0.189468000
Abatement Residues				Luc Cormier,875 Route 860,Hampton Parish	0.378936000
				Nancy Colpitts,2670 Route 705,Shannon	1.894682000
				Norbert Heldberg,162 Mannhurst Road,Mannhurst	0.757873000
				Peter McCreagh,2635 Rte 705,Shannon	0.568405000
				Ray Folkins,92 Route 870,Kierstead Mountain	0.568405000
				Reid Cleghorn,1158 Tweedside Rd,Harvey	1.515745000
				Scott Robinson,117 Upper Ward's Creek Rd,Sussex	2.463086000
				Shawn Moffat,119 Lester Road,Searsville	0.568405000
				Stanford Melvin,2558 Route 890,Cornhill	0.378936000
				Steven McFarlene,102 Creek Road,Waterford	0.189468000
				Ted Wiggans,149 Frog Lake Rd,Harvey Station	0.378936000
				Thomas Friars,158 Marshall Hill Road,Sussex	1.326277000
				Tim Cater,2700 Lower Cambridge Road,Cambridge Narrows	0.757873000
				Wayne Morgan,186 Bryson Rd,Take Rusagonis	0.378936000
				Willard Folkins,5 Folkins Lane,Mount Middleton	0.378936000

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	Pollution abatement residues
Reasons for change from previous year	Changes in composition of materials released/disposed of/transferred,Other (specify in comments field)

Substance detail

Lead (and its compounds)

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	kg	14.661373000	E2 - Published Emission Factors

Releases to water

Type	Units	Quantity	Basis of estimate	Receiving waterbody	Quantity released to waterbody
Direct Discharges	kg	25.264066000	M3 - Source Testing	Saint John River	25.264066000

Concentration of the Substance (Waterbody)

Information in Sampling and Detection Limits	All samples above detection limit
Was the quantity reported above estimated using half the detection limit for some or all values?	No
Method Detection Limit (ppm)	0.00010000
Average Concentration (ppm)	0.000667
More than one method detection limit applies	No
Concentration Comment(s)	

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product,Manufacture - Impurity,Process - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	Other
Reasons for change from previous year	Activities/events of a non-annual nature (e.g. a spill, tailings pond breach, or fire).
Comments on disposals	Recovery boiler underwent an acid wash in 2021. Materials generated through the acid wash were collected and sent offsite for disposal/treatment. There was no acid wash of the Recovery Boiler in 2021.
Comments on exclusions in tailing and waste rock	

Transfers for off-site recycling

Type	Units	Quantity	Basis of estimate	Receiving facility	Quantity transferred
Recovery of Pollution Abatement Residues	kg	167.714246000	M3 - Source Testing	Vaughn Sherwood,2513 Route 820,Upperton Amanda Tingley,4774 Route 895,Colpitts Settlement Amy Higgins,273 Meenans Cove Road,Quispamsis	4.232849000 1.693140000 0.846570000

Type	Units	Quantity	Basis of estimate		
Recovery of Pollution Abatement Residues	kg	167.714246000	M3 - Source Testing	Anthony Habraken□,119 Waterford Rd□,Dutch Valley□□	1.269855000
				Betty Floyd,676 Riverview Drive,East Apohaqui	1.693140000
				Bob Bates□,1222 Rte 850□,Kiersteadville□□	1.693140000
				Bob Gray□,191 Ravine Road□,Norton□□	1.693140000
				Brian Walker□,837 Route 880□,Lower Millstream□□	2.539709000
				Caleb Allen,4931 Rte 111,Hillsdale	0.423285000
				Clarendon Compost Facility,7849 Route 101 Hwy,Clarendon	19.559041000
				Cody Carmichael,518 Searletown Rd,Albany	2.116425000
				Daan Kalverboer,2442 Route 121,Apohaqui	5.784894000
				Dave Hansen,1375 Route 860,Smithtown	0.423285000
				Don Bostwick□,36 Boswick Road□,Kingston□□	1.693140000
				Ed Martin□,7139 Rte 102□,Browns Flat□□	1.693140000
				Envirem Organics Inc.,122 Killarney Road,Fredericton	30.512507000
				Envirem Organics Inc.,325 Perimeter Rd,Miramichi	8.858470000
				Eric Walker□,6762 New Line Road□,Sussex□□	5.079419000
				Evan Parlee,110 Mcfarlane road,Waterford	2.962994000
				Evelyn Martin□,3427 Route 710□,Henderson Settlement□□	1.269855000
				Frank van der Laan□,36 Vanderlaan Lane□,Norton□□	8.465698000
				Geoff Giffin,95 Highway 6,Amherst	1.269855000
				Gerard Verhoeven□,135 Pulmweseep□,Sussex□□	4.232849000
				Graham Lutz,5198 Rte 115 (delivery location),Keys Mills	1.693140000
				Harold Crowe,287 Route 890,Smiths Creek	0.423285000
				Jacob Wesselius□,850 Wheaton Settlement Road□,Wheaton Settlement□□	4.232849000
				Jeffery Swan,134 Patterson Road,Manners Sutton Parish	0.423285000
				Jim McEwen□,529 Robinson Road□,Salt Springs□□	0.846570000

Type	Units	Quantity	Basis of estimate		
Recovery of Pollution Abatement Residues	kg	167.714246000	M3 - Source Testing	Jim Walker□,557 Millbrook Road□,Newline□□	2.962994000
				John Schenkels,992 Route 425,Whitney	6.349274000
				John Wesselius ,529 Scott Road,Salisbury	7.054748000
				Joseph Steeves,1627 Route 895,Elgin	0.423285000
				Justin LaPointe,60 Baseline Road,Kars	0.423285000
				Kevin Cole,40 Grove Hill Road,Grove Hill	0.423285000
				Kevin or Brent Dunfield,2616 Route 890,Cornhill	1.269855000
				Lee Sharp,1302 Route 875,Lower Millstream	2.116425000
				Lonnie Hunter□,48 Shore Rd□, Bains Corner□□	0.705475000
				LP Consulting (Lise LeBlanc),9768	0.423285000
				NS-4,Oxford Luc Cormier,875 Route 860,Hampton Parish	0.846570000
				Nancy Colpitts,2670 Route 705,Shannon	4.232849000
				Norbert Heldberg,162 Mannhurst Road,Mannhurst	1.693140000
				Peter McCrea□,2635 Rte 705□,Shannon□□	1.269855000
				Ray Folkins,92 Route 870,Kierstead Mountain	1.269855000
				Reid Cleghorn,1158 Tweedside Rd,Harvey	3.386279000
				Scott Robinson□,117 Upper Ward's Creek Rd□,Sussex□□	5.502704000
				Shawn Moffat ,119 Lester Road,Searsville	1.269855000
				Stanford Melvin,2558 Route 890,Cornhill	0.846570000
				Steven McFarlene,102 Creek Road,Waterford	0.423285000
				Ted Wiggans□,149 Frog Lake Rd□,Harvey Station□□	0.846570000
				Thomas Friars,158 Marshall Hill Road,Sussex	2.962994000
				Tim Cater,2700 Lower Cambridge Road,Cambridge Narrows	1.693140000
				Wayne Morgan□,186 Bryson Rd□,Take Rusagonis□□	0.846570000
				Willard Folkins□,5 Folkins Lane□,Mount Middleton□□	0.846570000

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	Pollution abatement residues
Reasons for change from previous year	Changes in composition of materials released/disposed of/transferred

Substance detail

Manganese (and its compounds)

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	tonnes	0.085997000	E2 - Published Emission Factors

Releases to water

Type	Units	Quantity	Basis of estimate	Receiving waterbody	Quantity released to waterbody
Direct Discharges	tonnes	22.090268000	M3 - Source Testing	Saint John River	22.090268000

Concentration of the Substance (Waterbody)

Information in Sampling and Detection Limits	All samples above detection limit
Was the quantity reported above estimated using half the detection limit for some or all values?	No
Method Detection Limit (ppm)	0.00100000
Average Concentration (ppm)	0.582917
More than one method detection limit applies	No
Concentration Comment(s)	

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - Impurity,Process - By-Product,Otherwise Use - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	Other
Reasons for change from previous year	Activities/events of a non-annual nature (e.g. a spill, tailings pond breach, or fire).

Comments on disposals

Recovery boiler underwent an acid wash in 2021. Materials generated through the acid wash were collected and sent offsite for disposal/treatment. There was no acid wash of the Recovery Boiler in 2021.

Comments on exclusions in tailing and waste rock

Transfers for off-site recycling

Type	Units	Quantity	Basis of estimate	Receiving facility	Quantity transferred
Recovery of Pollution Abatement Residues	tonnes	178.917358000	M3 - Source Testing	Vaughn	3.019074000
				Sherwood,2513 Route 820,Upperton	
				Clarendon Compost Facility,7849 Route 101 Hwy,Clarendon	11.708149000
				Graham Lutz,5198 Rte 115 (delivery location),Keys Mills	1.207630000
				Justin LaPointe,60 Baseline Road,Kars	0.301907000
				Amanda Tingley,4774 Route 895,Colpitts Settlement	1.207630000
				Amy Higgins,273 Meenans Cove Road,Quispamsis	0.603815000
				Anthony Habraken□,119 Waterford Rd□,Dutch Valley□□	0.905722000
				Betty Floyd,676 Riverview Drive,East Apohaqui	1.207630000
				Bob Bates□,1222 Rte 850□,Kiersteadville□□	1.207630000
				Bob Gray□,191 Ravine Road□,Norton□□	1.207630000
				Brian Walker□,837 Route 880□,Lower Millstream□□	1.811444000
				Caleb Allen,4931 Rte 111,Hillsdale	0.301907000
				Cody Carmichael,518 Searletown Rd,Albany	1.509537000
				Daan Kalverboer,2442 Route 121,Apohaqui	4.126068000
				Dave Hansen,1375 Route 860,Smithtown	0.301907000
				Don Bostwick□,36 Boswick Road□,Kingston□□	1.207630000
				Ed Martin□,7139 Rte 102□,Browns Flat□□	1.207630000
				Eric Walker□,6762 New Line Road□,Sussex□□	3.622889000
				Evan Parlee,110 Mcfarlane road,Waterford	2.113352000
				Evelyn Martin□,3427 Route 710□,Henderson Settlement□□	0.905722000
				Frank van der Laan□,36 Vanderlaan Lane□,Norton□□	6.038148000
				Geoff Giffin,95 Highway 6,Amherst	0.905722000
				Gerard Verhoeven□,135	3.019074000

Type	Units	Quantity	Basis of estimate	
Recovery of Pollution Abatement Residues	tonnes	178.917358000	M3 - Source Testing	Pulmweseep□,Sussex 3.019074000 □□
				Harold Crowe,287 0.301907000 Route 890,Smiths Creek
				Jacob Wesselius□,850 3.019074000 Wheaton Settlement Road□,Wheaton Settlement□□
				Jeffery Swan,134 0.301907000 Patterson Road,Manners Sutton Parish
				Jim McEwen□,529 0.603815000 Robinson Road□,Salt Springs□□
				Jim Walker□,557 2.113352000 Millbrook Road□,Newline□□
				Joseph Steeves,1627 0.301907000 Route 895,Elgin
				John Schenkels,992 4.528611000 Route 425,Whitney
				John Wesselius ,529 5.031790000 Scott Road,Salisbury
				Kevin Cole,40 Grove 0.301907000 Hill Road,Grove Hill
				Kevin or Brent 0.905722000 Dunfield,2616 Route 890,Cornhill
				Lee Sharp,1302 Route 1.509537000 875,Lower Millstream
				Lonnie Hunter□,48 0.503179000 Shore Rd□,Bains Corner□□
				LP Consulting (Lise 0.301907000 LeBlanc),9768 NS-4,Oxford
				Luc Cormier,875 0.603815000 Route 860,Hampton Parish
				Nancy Colpitts,2670 3.019074000 Route 705,Shannon
				Norbert Heldberg,162 1.207630000 Mannhurst Road,Mannhurst
				Peter McCrea□,2635 0.905722000 Rte 705□,Shannon□□
				Ray Folkins,92 Route 0.905722000 870,Kierstead Mountain
				Reid Cleghorn,1158 2.415259000 Tweedside Rd,Harvey
				Scott Robinson□,117 3.924796000 Upper Ward's Creek Rd□,Sussex□□
				Shawn Moffat ,119 0.905722000 Lester Road,Searsville
				Stanford Melvin,2558 0.603815000 Route 890,Cornhill
				Steven McFarlene,102 0.301907000 Creek Road,Waterford
				Ted Wiggans□,149 0.603815000 Frog Lake Rd□,Harvey Station□□
				Thomas Friars,158 2.113352000 Marshall Hill Road,Sussex
				Tim Cater,2700 Lower 1.207630000 Cambridge Road,Cambridge Narrows
				Wayne Morgan□,186 0.603815000

Type	Units	Quantity	Basis of estimate		
Recovery of Pollution Abatement Residues	tonnes	178.917358000	M3 - Source Testing	Bryson Rd□,Take Rusagonis□□	0.603815000
				Willard Folkins□,5 Folkins Lane□,Mount Middleton□□	0.603815000
				Envirem Organics Inc.,122 Killarney Road,Fredericton	69.454727000
				Envirem Organics Inc.,325 Perimeter Rd,Miramichi	20.164280000

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	Pollution abatement residues
Reasons for change from previous year	Other (specify in comments field)

Substance detail

Zinc (and its compounds)

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	tonnes	0.117134000	E2 - Published Emission Factors

Releases to water

Type	Units	Quantity	Basis of estimate		
Direct Discharges	tonnes	1.717957000	M3 - Source Testing	Receiving waterbody	Quantity released to waterbody
				Saint John River	1.717957000

Concentration of the Substance (Waterbody)

Information in Sampling and Detection Limits	All samples above detection limit
Was the quantity reported above estimated using half the detection limit for some or all values?	No
Method Detection Limit (ppm)	0.00100000
Average Concentration (ppm)	0.045333
More than one method detection limit applies	No
Concentration Comment(s)	

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product,Manufacture - Impurity,Process - By-Product
Reasons for change from previous year	Changes in composition of materials released/disposed of/transferred

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	Other
Reasons for change from previous year	Activities/events of a non-annual nature (e.g. a spill, tailings pond breach, or fire).
Comments on disposals	Recovery boiler underwent an acid wash in 2021. Materials generated through the acid wash were collected and sent offsite for disposal/treatment. There was no acid wash of the Recovery Boiler in 2021.
Comments on exclusions in tailing and waste rock	

Transfers for off-site recycling

Type	Units	Quantity	Basis of estimate	Receiving facility	Quantity transferred
Recovery of Pollution Abatement Residues	tonnes	11.095087000	M3 - Source Testing	Vaughn	0.241270000
				Sherwood,2513 Route 820,Upperton	
				Amanda Tingley,4774 Route 895,Colpitts Settlement	0.096508000
				Amy Higgins,273 Meenans Cove Road,Quispamsis	0.048254000
				Anthony Habraken□,119 Waterford Rd□, Dutch Valley□□	0.072381000
				Betty Floyd,676 Riverview Drive,East Apohaqui	0.096508000
				Bob Bates□,1222 Rte 850□,Kiersteadville□	0.096508000
				Bob Gray□,191 Ravine Road□,Norton□□	0.096508000
				Brian Walker□,837 Route 880□,Lower Millstream□□	0.144762000
				Caleb Allen,4931 Rte 111,Hillsdale	0.024127000
				Clarendon Compost Facility,7849 Route 101 Hwy,Clarendon	0.352711000
				Cody Carmichael,518 Searletown Rd,Albany	0.120635000
				Daan Kalverboer,2442 Route 121,Apohaqui	0.329736000
				Dave Hansen,1375 Route 860,Smithtown	0.024127000
				Don Bostwick□,36 Boswick Road□,Kingston□□	0.096508000
				Ed Martin□,7139 Rte 102□,Browns Flat□□	0.096508000

Type	Units	Quantity	Basis of estimate		
Recovery of Pollution Abatement Residues	tonnes	11.095087000	M3 - Source Testing	Envirem Organics Inc.,122 Killarney Road,Fredericton	3.519846000
				Envirem Organics Inc.,325 Perimeter Rd,Miramichi	1.021890000
				Eric Walker□,6762 New Line Road□,Sussex□□	0.289524000
				Evan Parlee,110 Mcfarlane road,Waterford	0.168889000
				Evelyn Martin□,3427 Route 710□,Henderson Settlement□□	0.072381000
				Frank van der Laan□,36 Vanderlaan Lane□,Norton□□	0.482540000
				Geoff Giffin,95 Highway 6,Amherst	0.072381000
				Gerard Verhoeven□,135 Pulmweseep□,Sussex □□	0.241270000
				Graham Lutz,5198 Rte 115 (delivery location),Keys Mills	0.096508000
				Harold Crowe,287 Route 890,Smiths Creek	0.024127000
				Jacob Wesselius□,850 Wheaton Settlement Road□,Wheaton Settlement□□	0.241270000
				Jeffery Swan,134 Patterson Road,Manners Sutton Parish	0.024127000
				Jim McEwen□,529 Robinson Road□,Salt Springs□□	0.048254000
				Jim Walker□,557 Millbrook Road□,Newline□□	0.168889000
				John Schenkels,992 Route 425,Whitney	0.361905000
				John Wesselius ,529 Scott Road,Salisbury	0.402117000
				Joseph Steeves,1627 Route 895,Elgin	0.024127000
				Justin LaPointe,60 Baseline Road,Kars	0.024127000
				Kevin Cole,40 Grove Hill Road,Grove Hill	0.024127000
				Kevin or Brent Dunfield,2616 Route 890,Cornhill	0.072381000
				Lee Sharp,1302 Route 875,Lower Millstream	0.120635000
				Lonnie Hunter□,48 Shore Rd□,Bains Corner□□	0.040212000
				LP Consulting (Lise LeBlanc),9768 NS-4,Oxford	0.024127000
				Luc Cormier,875 Route 860,Hampton Parish	0.048254000
				Nancy Colpitts,2670 Route 705,Shannon	0.241270000
				Norbert Heldberg,162 Mannhurst Road,Mannhurst	0.096508000

Type	Units	Quantity	Basis of estimate	
Recovery of Pollution Abatement Residues	tonnes	11.095087000	M3 - Source Testing	Peter McCrea□,2635 Rte 705□,Shannon□□ Ray Folkins,92 Route 870,Kierstead Mountain Reid Cleghorn,1158 Tweedside Rd,Harvey Scott Robinson□,117 Upper Ward's Creek Rd□,Sussex□□ Shawn Moffat ,119 Lester Road,Searsville Stanford Melvin,2558 Route 890,Cornhill Steven McFarlene,102 Creek Road,Waterford Ted Wiggans□,149 Frog Lake Rd□,Harvey Station□□ Thomas Friars,158 Marshall Hill Road,Sussex Tim Cater,2700 Lower Cambridge Road,Cambridge Narrows Wayne Morgan□,186 Bryson Rd□,Take Rusagonis□□ Willard Folkins□,5 Folkins Lane□,Mount Middleton□□

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	Pollution abatement residues
Reasons for change from previous year	Changes in composition of materials released/disposed of/transferred

Substance detail

Ammonia (total)

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	tonnes	48.325518000	E2 - Published Emission Factors

Releases to water

Type	Units	Quantity	Basis of estimate	
Direct Discharges	tonnes	15.933912000	M3 - Source Testing	Receiving waterbody Saint John River
				Quantity released to waterbody 15.933912000

Concentration of the Substance (Waterbody)

Information in Sampling and Detection Limits	All samples above detection limit
Was the quantity reported above estimated using half the detection limit for some or all values?	No
Method Detection Limit (ppm)	1.00000000
Average Concentration (ppm)	1.533300
More than one method detection limit applies	No
Concentration Comment(s)	

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product,Process - By-Product,Otherwise Use - Ancillary/Other use
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	Other
Reasons for change from previous year	Activities/events of a non-annual nature (e.g. a spill, tailings pond breach, or fire).
Comments on disposals	Recovery boiler underwent an acid wash in 2021. Materials generated through the acid wash were collected and sent offsite for disposal/treatment. There was no acid was of the Recovery Boiler in 2021.
Comments on exclusions in tailing and waste rock	

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)

Substance detail

Nitrate ion in solution at pH \geq 6.0

Releases to water

Type	Units	Quantity	Basis of estimate	Receiving waterbody	Quantity released to waterbody
Direct Discharges	tonnes	59.578082000	M3 - Source Testing		

Type	Units	Quantity	Basis of estimate		
Direct Discharges	tonnes	59.578082000	M3 - Source Testing	Saint John River	59.578082000

Concentration of the Substance (Waterbody)

Information in Sampling and Detection Limits	Half or more than half of samples above detection limit
Was the quantity reported above estimated using half the detection limit for some or all values?	Yes
Method Detection Limit (ppm)	0.05000000
Average Concentration (ppm)	1.572143
More than one method detection limit applies	No
Concentration Comment(s)	

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product, Process - By-Product, Otherwise Use - By-Product
Reasons for change from previous year	Changes in composition of materials released/disposed of/transferred
Comments on releases	Lower measured concentration in effluent
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)

Substance detail

Hexavalent chromium (and its compounds)

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	kg	6.664249000	E2 - Published Emission Factors

Releases to water

Type	Units	Quantity	Basis of estimate
Direct Discharges	kg	31.453763000	E2 - Published Emission Factors
			Receiving waterbody
			Saint John River
			Quantity released to waterbody
			31.453763000

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product,Manufacture - Impurity,Process - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Transfers for off-site recycling

Type	Units	Quantity	Basis of estimate
Recovery of Pollution	kg	175.279091000	E2 - Published Emission Factors
Abatement Residues			Receiving facility
			Vaughn
			Sherwood,2513 Route
			820,Upperton
			Amanda Tingley,4774
			Route 895,Colpitts
			Settlement
			Amy Higgins,273
			Meenans Cove
			Road,Quispamsis
			Anthony
			Habraken□,119
			Waterford Rd□,Dutch
			Valley□□
			Betty Floyd,676
			Riverview Drive,East

Type	Units	Quantity	Basis of estimate		
Recovery of Pollution Abatement Residues	kg	175.279091000	E2 - Published Emission Factors	Apohaqui	1.154456000
				Bob Bates□,1222 Rte 850□,Kiersteadville□	1.154456000
				□	
				Bob Gray□,191 Ravine	1.154456000
				Road□,Norton□□	
				Brian Walker□,837 Route 880□,Lower Millstream□□	1.731683000
				Caleb Allen,4931 Rte 111,Hillsdale	0.288614000
				Clarendon Compost Facility,7849 Route 101 Hwy,Clarendon	34.945099000
				Cody Carmichael,518 Searletown Rd,Albany	1.443069000
				Daan Kalverboer,2442 Route 121,Apohaqui	3.944390000
				Dave Hansen,1375 Route 860,Smithtown	0.288614000
				Don Bostwick□,36 Boswick	1.154456000
				Road□,Kingston□□	
				Ed Martin□,7139 Rte 102□,Browns Flat□□	1.154456000
				Envirem Organics Inc.,122 Killarney Road,Fredericton	51.274164000
				Envirem Organics Inc.,325 Perimeter Rd,Miramichi	14.886050000
				Eric Walker□,6762 New Line	3.463367000
				Road□,Sussex□□	
				Evan Parlee,110 Mcfarlane road,Waterford	2.020297000
				Evelyn Martin□,3427 Route 710□,Henderson Settlement□□	0.865842000
				Frank van der Laan□,36 Vanderlaan Lane□,Norton□□	5.772278000
				Geoff Giffin,95 Highway 6,Amherst	0.865842000
				Gerard Verhoeven□,135 Pulmweseep□,Sussex□□	2.886139000
				Graham Lutz,5198 Rte 115 (delivery location),Keys Mills	1.154456000
				Harold Crowe,287 Route 890,Smiths Creek	0.288614000
				Jacob Wesselius□,850 Wheaton Settlement Road□,Wheaton Settlement□□	2.886139000
				Jeffery Swan,134 Patterson Road,Manners Sutton Parish	0.288614000
				Jim McEwen□,529 Robinson Road□,Salt Springs□□	0.577228000
				Jim Walker□,557 Millbrook Road□,Newline□□	2.020297000
				John Schenkels,992 Route 425,Whitney	4.329208000
				John Wesselius ,529	4.810232000

Type	Units	Quantity	Basis of estimate		
Recovery of Pollution Abatement Residues	kg	175.279091000	E2 - Published Emission Factors	Scott Road,Salisbury	4.810232000
				Joseph Steeves,1627	0.288614000
				Route 895,Elgin	
				Justin LaPointe,60	0.288614000
				Baseline Road,Kars	
				Kevin Cole,40 Grove	0.288614000
				Hill Road,Grove Hill	
				Kevin or Brent	0.865842000
				Dunfield,2616 Route	
				890,Cornhill	
				Lee Sharp,1302 Route	1.443069000
				875,Lower Millstream	
				Lonnie Hunter□,48	0.481023000
				Shore Rd□,Bains	
				Corner□□	
				LP Consulting (Lise	0.288614000
				LeBlanc),9768	
				NS-4,Oxford	
				Luc Cormier,875	0.577228000
				Route 860,Hampton	
				Parish	
				Nancy Colpitts,2670	2.886139000
				Route 705,Shannon	
				Norbert Heldberg,162	1.154456000
				Mannhurst	
				Road,Mannhurst	
				Peter McCre□,2635	0.865842000
				Rte 705□,Shannon□□	
				Ray Folkins,92 Route	0.865842000
				870,Kierstead	
				Mountain	
				Reid Cleghorn,1158	2.308911000
				Tweedside Rd,Harvey	
				Scott Robinson□,117	3.751981000
				Upper Ward's Creek	
				Rd□,Sussex□□	
				Shawn Moffat ,119	0.865842000
				Lester Road,Searsville	
				Stanford Melvin,2558	0.577228000
				Route 890,Cornhill	
				Steven McFarlene,102	0.288614000
				Creek Road,Waterford	
				Ted Wiggans□,149	0.577228000
				Frog Lake	
				Rd□,Harvey	
				Station□□	
				Thomas Friars,158	2.020297000
				Marshall Hill	
				Road,Sussex	
				Tim Cater,2700 Lower	1.154456000
				Cambridge	
				Road,Cambridge	
				Narrows	
				Wayne Morgan□,186	0.577228000
				Bryson Rd□,Take	
				Rusagonis□□	
				Willard Folkins□,5	0.577228000
				Folkins Lane□,Mount	
				Middleton□□	

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	Pollution abatement residues
Reasons for change from previous year	Other (specify in comments field)

Substance detail

Phosphorus (total)

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	tonnes	0.224026000	E2 - Published Emission Factors

Releases to water

Type	Units	Quantity	Basis of estimate
Direct Discharges	tonnes	42.475212000	M3 - Source Testing
			Receiving waterbody
			Saint John River
			Quantity released to waterbody
			42.475212000

Concentration of the Substance (Waterbody)

Information in Sampling and Detection Limits	All samples above detection limit
Was the quantity reported above estimated using half the detection limit for some or all values?	No
Method Detection Limit (ppm)	0.00200000
Average Concentration (ppm)	1.120833
More than one method detection limit applies	No
Concentration Comment(s)	

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - Impurity,Process - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	Other
Reasons for change from previous year	Activities/events of a non-annual nature (e.g. a spill, tailings pond breach, or fire).
Comments on disposals	Recovery boiler underwent an acid wash in 2021. Materials generated through the acid wash were collected and sent offsite for disposal/treatment. There was no acid wash of the Recovery Boiler in 2021.
Comments on exclusions in tailing and waste	

Transfers for off-site recycling

Type	Units	Quantity	Basis of estimate	Receiving facility	Quantity transferred
Recovery of Pollution Abatement Residues	tonnes	56.266931000	M3 - Source Testing	Amanda Tingley,4774 Route 895,Colpitts Settlement	0.505341000
				Amy Higgins,273 Meenans Cove Road,Quispamsis	0.252671000
				Anthony Habraken□,119 Waterford Rd□,Dutch Valley□□	0.379006000
				Betty Floyd,676 Riverview Drive,East Apohaqui	0.505341000
				Bob Bates□,1222 Rte 850□,Kiersteadville□□	0.505341000
				Bob Gray□,191 Ravine Road□,Norton□□	0.505341000
				Brian Walker□,837 Route 880□,Lower Millstream□□	0.758012000
				Caleb Allen,4931 Rte 111,Hillsdale	0.126335000
				Clarendon Compost Facility,7849 Route 101 Hwy,Clarendon	5.860403000
				Cody Carmichael,518 Searletown Rd,Albany	0.631677000
				Daan Kalverboer,2442 Route 121,Apohaqui	1.726583000
				Dave Hansen,1375 Route 860,Smithtown	0.126335000
				Don Bostwick□,36 Boswick Road□,Kingston□□	0.505341000
				Ed Martin□,7139 Rte 102□,Browns Flat□□	0.505341000
				Envirem Organics Inc.,122 Killarney Road,Fredericton	13.902222000
				Envirem Organics Inc.,325 Perimeter Rd,Miramichi	4.036130000
				Eric Walker□,6762 New Line Road□,Sussex□□	1.516024000
				Evan Parlee,110 Mcfarlane road,Waterford	0.884347000
				Evelyn Martin□,3427 Route 710□,Henderson Settlement□□	0.379006000
				Frank van der Laan□,36 Vanderlaan Lane□,Norton□□	2.526707000
				Geoff Giffin,95 Highway 6,Amherst	0.379006000
				Gerard Verhoeven□,135 Pulmweseep□,Sussex□□	1.263353000
				Graham Lutz,5198 Rte 115 (delivery location),Keys Mills	0.505341000
				Harold Crowe,287 Route 890,Smiths	0.126335000

Type	Units	Quantity	Basis of estimate		
Recovery of Pollution	tonnes	56.266931000	M3 - Source Testing	Creek	0.126335000
Abatement Residues				Jacob Wesseliuss,850	1.263353000
				Wheaton Settlement	
				Road, Wheaton	
				Settlement	
				Jeffery Swan,134	0.126335000
				Patterson	
				Road,Manners Sutton	
				Parish	
				Jim McEwen,529	0.252671000
				Robinson Road,Salt	
				Springs	
				Jim Walker,557	0.884347000
				Millbrook	
				Road,Newline	
				John Schenkels,992	1.895030000
				Route 425,Whitney	
				John Wesseliuss,529	2.105589000
				Scott Road,Salisbury	
				Joseph Steeves,1627	0.126335000
				Route 895,Elgin	
				Justin LaPointe,60	0.126335000
				Baseline Road,Kars	
				Kevin Cole,40 Grove	0.126335000
				Hill Road,Grove Hill	
				Kevin or Brent	0.379006000
				Dunfield,2616 Route	
				890,Cornhill	
				Lee Sharp,1302 Route	0.631677000
				875,Lower Millstream	
				Lonnie Hunter,48	0.210559000
				Shore Rd,Bains	
				Corner	
				LP Consulting (Lise	0.126335000
				LeBlanc),9768	
				NS-4,Oxford	
				Luc Cormier,875	0.252671000
				Route 860,Hampton	
				Parish	
				Nancy Colpitts,2670	1.263353000
				Route 705,Shannon	
				Norbert Heldberg,162	0.505341000
				Mannhurst	
				Road,Mannhurst	
				Peter McCreas,2635	0.379006000
				Rte 705,Shannon	
				Ray Folkins,92 Route	0.379006000
				870,Kierstead	
				Mountain	
				Reid Cleghorn,1158	1.010683000
				Tweedside Rd,Harvey	
				Scott Robinson,117	1.642359000
				Upper Ward's Creek	
				Rd,Sussex	
				Shawn Moffat,119	0.379006000
				Lester Road,Searsville	
				Stanford Melvin,2558	0.252671000
				Route 890,Cornhill	
				Steven McFarlene,102	0.126335000
				Creek Road,Waterford	
				Ted Wiggans,149	0.252671000
				Frog Lake	
				Rd,Harvey	
				Station	
				Thomas Friars,158	0.884347000
				Marshall Hill	
				Road,Sussex	
				Tim Cater,2700 Lower	0.505341000
				Cambridge	
				Road,Cambridge	
				Narrows	
				Wayne Morgan,186	0.252671000
				Bryson Rd,Take	
				Rusagonis	

Type	Units	Quantity	Basis of estimate	
Recovery of Pollution Abatement Residues	tonnes	56.266931000	M3 - Source Testing	Willard Folkins□,5 Folkins Lane□,Mount Middleton□□ Vaughn Sherwood,2513 Route 820,Upperton
				0.252671000 1.263353000

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	Pollution abatement residues
Reasons for change from previous year	Other (specify in comments field)

Substance detail

Dioxins and furans - total

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	g TEQ	0.008319000	E2 - Published Emission Factors

Releases to water

Type	Units	Quantity	Basis of estimate
Direct Discharges	g TEQ		M3 - Source Testing Receiving waterbody Quantity released to waterbody

Concentration of the Substance (Waterbody)

Information in Sampling and Detection Limits	No samples above detection limit
Was the quantity reported above estimated using half the detection limit for some or all values?	No
Method Detection Limit (ppm)	
Average Concentration (ppm)	0.000000
More than one method detection limit applies	No
Concentration Comment(s)	

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product,Process - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Transfers for off-site recycling

Type	Units	Quantity	Basis of estimate
Recovery of Pollution	g TEQ		M3 - Source Testing
Abatement Residues			Receiving facility Quantity transferred

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	Pollution abatement residues
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)

Substance detail

Total particulate matter

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	tonnes	99.751449000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	
Reasons for change from previous year	Changes in composition of materials released/disposed of/transferred
Comments on releases	Lower emission rates measured during annual stack testing on Lime Kiln (-34%) and Recovery Boiler (-57%).
Comments on releases to land – other	

Substance detail

PM10 - Particulate Matter <= 10 Micrometers

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	tonnes	77.400988000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	
Reasons for change from previous year	Changes in composition of materials released/disposed of/transferred
Comments on releases	Lower emission rates measured during annual stack testing on Lime Kiln (-34%) and Recovery Boiler (-57%).
Comments on releases to land – other	

Substance detail

PM2.5 - Particulate Matter <= 2.5 Micrometers

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	tonnes	46.379709000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	
Reasons for change from previous year	Changes in composition of materials released/disposed of/transferred
Comments on releases	Lower emission rates measured during annual stack testing on Lime Kiln (-34%) and Recovery Boiler (-57%).
Comments on releases to land – other	

Substance detail

Total reduced sulphur (expressed as hydrogen sulphide)

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	tonnes	12.743881000	M1 - Continuous Emission Monitoring

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product,Process - By-Product
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Substance detail

Volatile Organic Compounds (Total)

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	tonnes	227.260337000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Substance detail

Speciated VOCs (62 substances)

Additional information

Contextual information

Nature of activities related to the substance	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on releases	
Comments on releases to land – other	

Substance detail

Hydrochloric acid

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	tonnes	4.408227000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product,Otherwise Use - Ancillary/Other use
Reasons for change from previous year	Not Applicable (First year reporting this substance)
Comments on releases	Used as a reactant during acid wash of recovery boiler.
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)
Comments on disposals	
Comments on exclusions in tailing and waste rock	

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	
Reasons for change from previous year	No Significant Change (i.e. < 0 - 10%)

Substance detail

Arsenic (and its compounds)

Releases

Releases to air

Type	Units	Quantity	Basis of estimate
Stack / Point	kg	0.735481000	E2 - Published Emission Factors

Additional information

Contextual information

Nature of activities related to the substance	Manufacture - By-Product, Process - By-Product
Reasons for change from previous year	Not Applicable (First year reporting this substance)
Comments on releases	No detectable levels found in effluent samples, therefore no Releases to water bodies are reported.
Comments on releases to land – other	

Quarterly releases

Quarter	Release percentage
Q1	25.000000
Q2	25.000000
Q3	25.000000
Q4	25.000000

Additional information on disposals

Contextual information

Reason(s) for substance disposal	Other
Reasons for change from previous year	Activities/events of a non-annual nature (e.g. a spill, tailings pond breach, or fire).
Comments on disposals	Recovery boiler underwent an acid wash in 2021. Materials generated through the acid wash were collected and sent offsite for disposal/treatment. There was no acid wash of the Recovery Boiler in 2021.
Comments on exclusions in tailing and waste rock	

Transfers for off-site recycling

Type	Units	Quantity	Basis of estimate	Receiving facility	Quantity transferred
Recovery of Pollution Abatement Residues	kg	64.466177000	M3 - Source Testing	Vaughn	1.834312000
				Sherwood, 2513 Route 820, Upperton	
				Amanda Tingley, 4774 Route 895, Colpitts Settlement	0.733725000
				Amy Higgins, 273 Meenans Cove Road, Quispamsis	0.366862000
				Anthony Habraken, 119 Waterford Rd, Dutch Valley	0.550294000
				Betty Floyd, 676 Riverview Drive, East Apohaqui	0.733725000
				Bob Bates, 1222 Rte 850, Kiersteadville	0.733725000
				Bob Gray, 191 Ravine Road, Norton	0.733725000
				Brian Walker, 837 Route 880, Lower Millstream	1.100587000
				Caleb Allen, 4931 Rte 111, Hillsdale	0.183431000
				Clarendon Compost Facility, 7849 Route 101 Hwy, Clarendon	17.324359000
				Cody Carmichael, 518	0.917156000

Type	Units	Quantity	Basis of estimate	
Recovery of Pollution	kg	64.466177000	M3 - Source Testing	Searletown Rd,Albany 0.917156000
Abatement Residues				Daan Kalverboer,2442 2.506893000
				Route 121,Apohaqui
				Dave Hansen,1375 0.183431000
				Route 860,Smithtown
				Don Bostwick□,36 0.733725000
				Boswick
				Road□,Kingston□□
				Ed Martin□,7139 Rte 0.733725000
				102□,Browns Flat□□
				Envirem Organics 0.000000000
				Inc.,122 Killarney
				Road,Fredericton
				Envirem Organics 0.000000000
				Inc.,325 Perimeter
				Rd,Miramichi
				Eric Walker□,6762 2.201174000
				New Line
				Road□,Sussex□□
				Evan Parlee,110 1.284018000
				Mcfarlane
				road,Waterford
				Evelyn Martin□,3427 0.550294000
				Route
				710□,Henderson
				Settlement□□
				Frank van der 3.668624000
				Laan□,36 Vanderlaan
				Lane□,Norton□□
				Geoff Giffin,95 0.550294000
				Highway 6,Amherst
				Gerard 1.834312000
				Verhoeven□,135
				Pulmwesep□,Sussex
				□□
				Graham Lutz,5198 Rte 0.733725000
				115 (delivery
				location),Keys Mills
				Harold Crowe,287 0.183431000
				Route 890,Smiths
				Creek
				Jacob Wesselius□,850 1.834312000
				Wheaton Settlement
				Road□,Wheaton
				Settlement□□
				Jeffery Swan,134 0.183431000
				Patterson
				Road,Manners Sutton
				Parish
				Jim McEwen□,529 0.366862000
				Robinson Road□,Salt
				Springs□□
				Jim Walker□,557 1.284018000
				Millbrook
				Road□,Newline□□
				John Schenkels,992 2.751468000
				Route 425,Whitney
				John Wesselius ,529 3.057187000
				Scott Road,Salisbury
				Joseph Steeves,1627 0.183431000
				Route 895,Elgin
				Justin LaPointe,60 0.183431000
				Baseline Road,Kars
				Kevin Cole,40 Grove 0.183431000
				Hill Road,Grove Hill
				Kevin or Brent 0.550294000
				Dunfield,2616 Route
				890,Cornhill
				Lee Sharp,1302 Route 0.917156000
				875,Lower Millstream
				Lonnie Hunter□,48 0.305719000
				Shore Rd□,Bains
				Corner□□
				LP Consulting (Lise 0.183431000

Type	Units	Quantity	Basis of estimate		
Recovery of Pollution Abatement Residues	kg	64.466177000	M3 - Source Testing	LeBlanc),9768	0.183431000
				NS-4,Oxford	
				Luc Cormier,875	0.366862000
				Route 860,Hampton Parish	
				Nancy Colpitts,2670	1.834312000
				Route 705,Shannon	
				Norbert Heldberg,162	0.733725000
				Mannhurst Road,Mannhurst	
				Peter McCreath,2635	0.550294000
				Rte 705,Shannon	
				Ray Folkins,92 Route	0.550294000
				870,Kierstead Mountain	
				Reid Cleghorn,1158	1.467450000
				Tweedside Rd,Harvey	
				Scott Robinson,117	2.384606000
				Upper Ward's Creek Rd,Sussex	
				Shawn Moffat,119	0.550294000
				Lester Road,Searsville	
				Stanford Melvin,2558	0.366862000
				Route 890,Cornhill	
				Steven McFarlene,102	0.183431000
				Creek Road,Waterford	
				Ted Wiggans,149	0.366862000
				Frog Lake Rd,Harvey	
				Station	
				Thomas Friars,158	1.284018000
				Marshall Hill Road,Sussex	
				Tim Cater,2700 Lower	0.733725000
				Cambridge Road,Cambridge	
				Narrows	
				Wayne Morgan,186	0.366862000
				Bryson Rd,Take	
				Rusagonis	
				Willard Folkins,5	0.366862000
				Folkins Lane,Mount	
				Middleton	

Additional information on off-site recycling

Contextual information

Transfers for off-site recycling

Reason(s) for substance recycling	Pollution abatement residues
Reasons for change from previous year	Changes in composition of materials released/disposed of/transferred