NOTE: *Represents estimated emissions less than one (1) pound per year (lb/yr)

NOTE: During 2012 preparation an estimated value was provided for all emitted Toxic Air Pollutants (TAPs). Data was retroactively provided for any TAP that was emitted at greater than 1 lb/yr (5.0E-04TPY) during 2012 for CY2011 and CY2010.

NOTE: These values are estimated emissions determined by EPA emission factors, material balance, and process knowledge. They are not determined by continuous monitoring or sample analysis.

Data Table 4–7 Toxic Air Pollutant Emissions

Sample Measurement Section

2010-2014 Toxic Air Pollutant Emissions

Chemical Abstract Service Number (CAS)	Pollutant Name	2010 Estimated Emissions (Tons/Yr)	2011 Estimated Emissions (Tons/Yr)	2012 Estimated Emissions (Tons/Yr)	2013 Estimated Emissions (Tons/Yr)	2014 Estimated Emissions (Tons/Yr)
106-46-7	1,4-DICHLOROBENZENE			1.10E-05	1.10E-05	1.10E-05
540-84-1	2,2,4-TRIMETHYLPENTANE			4.80E-08	4.80E-08	4.80E-08
88-06-2	2,4,6-TRICHLOROPHENOL			5.00E-10	5.00E-10	5.00E-10
100-02-7	4-NITROPHENOL			2.62E-07	2.62E-07	8.13E-06
75-07-0	ACETALDEHYDE	1.49E-01	8.43E-02	4.53E-02	1.56E-02	7.04E-02
75-05-8	ACETONITRILE	*	2.20E-04	2.20E-04	2.20E-04	2.20E-04
98-86-2	ACETOPHENONE		2.67E-01	2.93E-04	1.60E-05	1.62E-05
107-02-8	ACROLEIN	3.60E-01		3.67E-02	9.58E-03	2.96E-01
107-13-1	ACRYLONITRILE	*	2.59E-02	2.59E-02	2.59E-02	2.59E-02
107-05-1	ALLYL CHLORIDE			1.40E-09	1.40E-09	1.40E-09
62-53-3	ANILINE	*	1.50E-09	1.50E-09	1.50E-09	1.50E-09
7440-36-0	ANTIMONY	1.46E-03	2.30E-03	2.63E-03	2.30E-03	2.30E-03
7440-38-2	ARSENIC	3.55E-02	1.70E-03	2.88E-04	1.09E-04	1.69E-03
71-43-2	BENZENE	4.99E-01	4.58E-01	2.33E-01	8.83E-02	3.82E-01
100-44-7	BENZYL CHLORIDE	5.68E-02	5.71E-02	1.29E-02	1.60E-09	1.60E-09
7440-41-7	BERYLLIUM	2.12E-03	1.70E-09	1.70E-09	1.70E-09	1.70E-09
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	5.93E-03	5.96E-03	1.35E-03	2.42E-07	3.60E-06
75-25-2	BROMOFORM	3.16E-03	3.18E-03	7.18E-04	*	*
106-99-0	BUTADIENE (1, 3-)	*	6.20E-06	6.20E-06	6.20E-06	6.20E-06
7440-43-9	CADMIUM	4.80E-03	4.09E-04	1.19E-04	5.20E-05	3.55E-04
75-15-0	CARBON DISULFIDE	1.05E-02	3.46E-03	5.86E-03	3.46E-03	3.46E-03
56-23-5	CARBON TETRACHLORIDE	1.51E-01	2.30E-01	2.28E-01	6.12E-03	9.53E-03
463-58-1	CARBONYL SULFIDE	*	2.28E-03	2.28E-03	2.28E-03	2.28E-03
7782-50-5	CHLORINE	6.80E-02	5.44E-02	7.76E-03	3.46E-03	5.99E-02
108-90-7	CHLOROBENZENE	4.57E-03	8.57E-02	8.41E-02	2.26E-03	4.62E-03
67-66-3	CHLOROFORM	1.62E-02	8.70E-02	8.67E-02	7.92E-04	2.79E-03
	CHROMIUM COMPOUNDS (AS Cr_2O_3)	9.56E-03	2.50E-03	8.03E-03	7.98E-03	8.00E-03
7440-48-4	COBALT	8.11E-03	2.04E-06	1.85E-03	1.93E-06	1.96E-06
98-82-8	CUMENE	4.30E-04	2.04E-01	1.05E-02	1.04E-02	1.04E-02
	CYANIDE COMPOUNDS	2.03E-01	1.50E-04	4.63E-02	1.50E-04	1.50E-04
132-64-9	DIBENZOFURAN			7.40E-10	7.40E-10	7.40E-10
84-74-2	DIBUTYL PHTHALATE			7.20E-09	7.20E-09	7.20E-09
77-78-1	DIMETHYL SULFATE	3.90E-03	3.92E-03	8.85E-04	*	*
121-14-2	DINITROTOLUENE (2, 4-)	2.27E-05	*	5.16E-06	*	*
123-91-1	DIOXANE	*	*	4.51E-02	4.51E-02	4.51E-02
100-41-4	ETHYL BENZENE	1.31E-02	5.31E-02	5.30E-02	5.98E-02	6.20E-02
75-00-3	ETHYL CHLORIDE (CHLOROETHANE)	3.41E-03	9.93E-03	7.27E-03	6.50E-03	6.50E-03
75-08-1	ETHYL MERCAPTAN	*	1.11E-02	1.11E-02	1.11E-02	1.11E-02
106-93-4	ETHYLENE DIBROMIDE			3.67E-05	1.46E-05	1.46E-05
107-06-2	ETHYLENE DICHLORIDE	5.69E-03	8.35E-03	4.11E-03	3.21E-03	5.29E-03
75-34-3	ETHYLIDENE DICHLORIDE (DICHLOROETHANE (1, 1-)	5.69E-03	1.84E-02	1.84E-02	1.84E-02	1.84E-02
50-00-0	FORMALDEHYDE	6.41E-02	3.47E-01	8.81E-02	3.40E-02	3.42E-01
64-18-6	FORMIC ACID	1.29E-01	1.29E-01	1.29E-01	1.29E-01	1.29E-01
87-68-3	HEXACHLORO-1,3-BUTADIENE			3.00E-08	3.00E-08	3.00E-08
118-74-1	HEXACHLOROBENZENE			1.20E-07	1.20E-07	1.20E-07
77-47-4	HEXACHLOROCYCLOPENTADIENE			1.90E-08	1.90E-08	1.90E-08
67-72-1	HEXACHLOROETHANE			5.50E-09	5.50E-09	5.50E-09
110-54-3	HEXANE	5.44E-03	9.62E-02	9.75E-02	9.62E-02	9.62E-02
7647-01-0	HYDROCHLORIC ACID (HYDROGEN CHLORIDE)	9.90E+01	1.27E+00	2.23E+01	4.55E-02	1.40E+00
74-90-8	HYDROGEN CYANIDE	*	8.10E-03	8.10E-03	8.10E-03	8.10E-03
2148-87-8	HYDROGEN SULFIDE	*	9.50E-02	9.50E-02	9.50E-02	9.50E-02
78-59-1	ISOPHORONE	4.71E-02	*	1.07E-02	*	*
7439-96-5	MANGANESE	5.36E-02	1.09E-01	1.47E-02	5.78E-03	1.21E-01
7439-97-6	MERCURY	8.93E-02	2.12E-01	5.76E-02	1.83E-01	2.20E-01
67-56-1	METHYL ALCOHOL	*	8.13E-02	8.13E-02	*	*
74-83-9	METHYL BROMIDE	1.42E-02	1.41E-02	3.07E-03	3.57E-05	1.11E-03
74-87-3	METHYL CHLORIDE (CHLOROMETHANE)	6.09E-02	4.95E-02	1.46E-02	4.75E-03	6.39E-03
71-55-6	METHYL CHLOROFORM (TRICHLOROETHANE (1, 1, 1-))	6.18E-03	1.02E-02	8.95E-03	7.62E-03	9.94E-03
78-93-3	METHYL ETHYL KETONE (2-BUTANONE)	3.21E-02	1.24E-01	1.33E-01	4.43E-02	4.47E-02
108-10-1	METHYL ISOBUTYL KETONE(4-METHYL-2-PENTANONE)	*	1.06E-02	1.06E-01	2.43E-02	2.43E-02
74-93-1	METHYL MERCAPTAN (METHANETHIOL)	*	9.31E-03	9.31E-03	9.31E-03	9.31E-03
80-62-6	METHYL METHACRYLATE	*	3.80E-10	3.69E-04	3.80E-10	3.80E-10
1634-04-4	METHYL TERT-BUTYL ETHER	2.84E-03	*	6.45E-04	*	*
75-09-2	METHYLENE CHLORIDE	4.80E-02	1.16E-01	1.05E-01	9.77E-02	1.24E-01
60-34-4	METHYLHYDRAZINE	1.38E-02	1.39E-02	3.14E-03	*	*
91-20-3	NAPHTHALENE	4.63E-03	3.60E-03	3.51E-03	1.96E-03	1.32E-03
7440-02-0	NICKEL	3.08E-02	7.30E-03	5.33E-03	5.10E-03	7.48E-03

2010-2014 Toxic Air Pollutant Emissions

Chemical Abstract Service Number (CAS)	Pollutant Name	2010 Estimated Emissions (Tons/Yr)	2011 Estimated Emissions (Tons/Yr)	2012 Estimated Emissions (Tons/Yr)	2013 Estimated Emissions (Tons/Yr)	2014 Estimated Emissions (Tons/Yr)
1313-99-1	NICKEL OXIDE			1.18E-05	8.20E-14	*
7697-37-2	NITRIC ACID	9.32E-01	5.44E-01	2.14E-01	1.63E+02	8.44E+01
98-95-3	NITROBENZENE			6.50E-11	6.50E-11	6.50E-11
55-63-0	NITROGLYCERINE			7.00E-10	7.00E-10	7.00E-10
144-62-7	OXALIC ACID	1.30E-12	1.64E-12	1.40E-12	1.40E-13	*
87-86-5	PENTACHLOROPHENOL			3.99E-07	1.22E-07	3.77E-06
108-95-2	PHENOL	5.59E-03	4.72E-03	6.96E-04	1.24E-04	3.77E-03
7723-14-0	PHOSPHORUS (YELLOW OR WHITE)	2.11E-04	5.20E-04	2.17E-04	3.21E-06	3.03E-06
1336-36-3	POLYCHLORINATED BIPHENYLS (AROCLORS)	3.95E-07	3.95E-07	*	*	*
	POLYCYCLIC ORGANIC MATTER	3.22E-01	2.54E-01	3.01E-02	9.05E-03	2.81E-01
123-38-6	PROPIONALDEHYDE	3.35E-02	3.32E-02	7.27E-03	8.32E-05	2.38E-03
78-87-5	PROPYLENE DICHLORIDE	2.78E-03	3.78E-03	1.83E-03	1.65E-03	4.01E-03
7782-49-2	SELENIUM	1.07E-01	6.80E-04	4.39E-04	2.14E-04	2.62E-04
1310-73-2	SODIUM HYDROXIDE (CAUSTIC SODA)	2.49E-01	2.49E-01	2.49E-01	3.18E-01	3.18E-01
100-42-5	STYRENE	1.62E-01	1.27E-01	1.54E-02	4.60E-03	1.40E-01
7664-73-9	SULFURIC ACID	*	9.20E-04	9.20E-04	9.20E-04	9.20E-04
79-34-5	TETRACHLOROETHANE (1, 1, 2, 2-)	4.56E-03	9.56E-02	9.56E-02	1.43E-02	1.43E-02
127-18-4	TETRACHLOROETHYLENE (PERCHLOROETHYLENE)	7.79E+00	6.24E+00	6.63E+00	5.66E+00	4.78E+00
108-88-3	TOLUENE	9.69E-02	5.26E-01	4.76E-01	3.86E-01	4.51E-01
79-01-6	TRICHLOROETHYLENE (TCE)	5.75E+00	5.52E+00	5.15E+00	4.32E+00	4.22E+00
108-05-4	VINYL ACETATE			1.40E-04	*	*
75-01-4	VINYL CHLORIDE	1.51E-03	4.06E-02	4.00E-02	3.99E-02	4.12E-02
75-35-4	VINYLIDENE CHLORIDE (DICHLOROETHYLENE (1, 1-))	6.55E-02	6.75E-02	6.68E-02	7.48E-02	6.79E-02
1330-20-7	XYLENE (MIXED ISOMERS)(XYLOL)	2.38E-02	3.73E-01	3.73E-01	2.90E-01	2.92E-01