2018 AirToxScreen Emissions Updates (as of October 13, 2022)

Emissions for the sources listed below have changed since EPA completed the modeling step of the AirToxScreen analysis. This list includes sources with:

- Known changes to emissions that occurred after 2018 (and therefore are not reflected in AirToxScreen)
- Changes that EPA incorporated into the AirToxScreen results via post-modeling corrections
- Recent corrections to 2018 emissions that are not reflected in the AirToxScreen results
- Minor corrections that did not impact resulting concentrations or risks

1. Known changes to Emissions that occurred after year 2018

AirToxScreen reflects emissions in 2018. The following facilities have had reductions, corrections, or elimination of emissions since 2018. There are additional shutdowns that have occurred, the ones listed here have been featured on the AirToxScreen Mapping Tool. This should be considered in your use of AirToxScreen to prioritize pollutants or sources for further study.

Facility Shutdowns:

EPA			EIS Facility		Emissions by pollutant (year
Region	State	County	ID	Facility Name	2018 tons)
4	NC	Surry	8514411	Duvaltex, Inc.	Chromium (VI) 2.19E-02,
					Acetaldehyde 5.04E-05,
					Carbon Tetrachloride 1.65E-07,
					Benzene 6.46E-05,
					Formaldehyde 6.05E-03, and
					others of less significance.
4	SC	Lancaster	6519311	Duracell	Manganese 6.06E-01, Toluene
				International	1.00E+00
4	SC	McCormick	3795211	Georgia-Pacific	Acetaldehyde 1.72E+00,
				Wood Products	Carbon Tetrachloride 4.23E-03,
				LLC (McCormick	Benzene 4.11E-01,
				Sawmill)	Formaldehyde 2.72E+00, and
					others of less significance.
5	IL	Cook	2783011	Clybourn Metal	Trichloroethylene 3.74E+00
				Finishing Co	
5	IL	Kane	1910611	Pamarco Inc	Chromium (VI) 5.24E-01
5	IL	Du Page	3219211	Sterigenics US LLC	Ethylene Oxide 1.40E+00, and
					others of less significance
5	MN	Ramsey	7029211	Viking Drill & Tool	Trichloroethylene 1.38E+01
				Inc	
5	ОН	Cuyahoga	8251111	M.P.C. Plating, Inc.	Chromium (VI) 1.41E-01,
				(1318000838)	Nickel 2.74E-01,
					Trichloroethylene 4.95E+00

EPA			EIS Facility		Emissions by pollutant (year
Region	State	County	ID	Facility Name	2018 tons)
5	WI	Dane	18988311	American Contract	Ethylene Oxide 3.54E-02
				Systems, Inc.	
5	WI	Milwaukee	6273411	AMERICAS BEST	Chromium (VI) 1.55E-04,
				QUALITY	Nickel 8.50E-03
				COATINGS CORP	
6	TX	Harris	4058511	GREENS BAYOU	Chromium (VI) 5.58E-06,
				PLANT	Naphthalene 1.65E-04,
					Acetaldehyde 1.95E-04,
					Carbon Tetrachloride
					1.18E+00, Benzene 9.79E-04,
					Formaldehyde 2.63E-03, and
					others of less significance
9	CA	Los Angeles	5786211	TORRANCE	Nickel 9.55E-02, Naphthalene
				REFINERY	1.12E+00, Benzene 2.26E+00,
					PAH/POM 9.95E-03, and
					others of less significance.
9	NV	Washoe	5161011	SCHLOSSER FORGE	Cobalt 5.50E-02, Chromium
				CO-VIKING	(VI) 6.00E-03, Nickel 3.00E-01

Unit Shutdowns:

EPA Region	State	EIS Facility ID	Facility Name	Unit Description	ethylene oxide modeled
Region		racility ID			(Year 2018 Tons)
5	IL	7299411	Evanston Hospital	Ethylene oxide sterilizers removed April 2021	0.0187
5	IL	8016811	Memorial Medical Center	Ethylene oxide sterilizers removed February 2020	0.0600
5	⊒	3340511	Swedish Covenant Hospital	Ethylene oxide sterilizers removed January 2019	0.0540
5	IL	5528111	Baxter Healthcare Corp	Ethylene oxide sterilizers shutdown April 2019 and removed December 2019	0.542
5	IL	4707411	Red Bud Regional Hospital	Ethylene oxide sterilizers removed January 2019	0.0130
5	IL	4613911	Christ Hospital & Medical Center	Ethylene oxide sterilizers removed March 2019	0.000056
5	MI	4173711	Viant Medical Inc.	Ethylene oxide - Viant Medical has signed a consent order to stop sterilizing medical devices using ethylene oxide (EtO) at its plant in Grand Rapids, Mich. by Dec. 31, 2020	0.189

EPA Region	State	EIS Facility ID	Facility Name	Unit Description	ethylene oxide modeled (Year 2018 Tons)
5	MI	5888411	Centurion Medical Products	Ethylene oxide - Stopped ethylene oxide sterilization by end of Oct 2021	0.116
9	AZ	1013511	Centurion Medical Products	Ethylene oxide – stopped ethylene oxide sterilization by Nov 2021	0.387

Additional Emission Corrections:

Arizona:

- Baxter Healthcare Corporation (EIS Facility ID: 1073211) ethylene oxide emission controls installed in 2022.
- American Contract Systems Inc (Facility ID: ACSAZ) installed controls for ethylene oxide emissions in 2022.

• California:

- Sterigenics US, Inc (Facility ID: EISSTERIGENICSLA) installed controls for ethylene oxide emissions in 2022.
- Steris, Inc. (Facility ID: STERISTEMECULA) installed additional controls for ethylene oxide 1/2021.
- Steris Isomedix Services Inc (EIS Facility ID: 7125311) installed additional controls for ethylene oxide 9/2021.
- Colorado: Terumo Sterilization Lakewood (EIS Facility ID: 3832911) installed controls for ethylene oxide fugitive emissions in 2018.
- Delaware: Croda Inc. (EIS Facility ID: 588911) facility emissions have decreased due to installed control devices and process changes. 2018 emissions are also elevated due to a release of ethylene oxide that occurred.

Florida:

- American Contract Systems, Inc (Facility ID: ACSTEMPLETERRACE) installed ethylene oxide controls after year 2018.
- Fort Myers Facility (Facility ID: FORTMYERS) installed ethylene oxide controls after year 2018.

Georgia:

- Sterigenics U.S. LLC (EIS Facility ID: 3699811) ethylene oxide emission controls installed after year 2018.
- Sterilization Services of Georgia (EIS Facility ID: 4315911) ethylene oxide emission controls installed after year 2018.
- Becton Dickinson (EIS Facility ID: 2686511) ethylene oxide emission controls installed after year 2018.
- BD (Becton. Dickinson and Company) (EIS Facility ID: 17953911) ethylene oxide emission controls installed after year 2018.
- BD Global Distribution Center (EIS Facility ID: 18922211) installed ethylene oxide controls after year 2018.

Illinois:

- Medline Industries Inc, Northpoint Services Division (EIS Facility ID: 8140511) installed ethylene oxide emission controls and CEMS in 2019.
- Vantage Specialties Inc (EIS Facility ID: 5011811) installed additional ethylene oxide controls, established enhanced LDAR, and installed CEMS.
- Indiana: Cook, Incorporated (EIS Facility ID: 4553311) ethylene oxide emission controls installed after year 2018.
- Iowa: American Contract Systems, Inc (Facility ID: ACSIA) installed ethylene oxide controls in 2021.
- Louisiana: Denka Performance Elastomer LLC (EIS Facility ID: 17640111) installed chloroprene emissions controls systems in 2018.
- Massachusetts: Isomedix Operation, Inc. (EIS Facility ID: 8142611) installed ethylene oxide controls 2/2021.
- Minnesota: Steris Inc. (EIS Facility ID: 6449011) installed control for ethylene oxide 7/2021.
- Missouri: Midwest Sterilization Corp-Jackson (EIS Facility ID: 7703311) ethylene oxide emission controls installed after year 2018.
- New Jersey: Steris Isomedix Services Inc. (EIS Facility ID: 6721211) installed ethylene oxide controls 7/2021.
- New Mexico: Sterigenics-Santa Teresa (EIS Facility ID: 7582111) ethylene oxide emission controls installed in 2022.
- New York: Sterigenics US LLC (EIS Facility ID: 8409411) ethylene oxide emission controls installed after year 2018.
- North Carolina: Andersen Products, Inc (EIS Facility ID: 13453111) discontinued use of ethylene oxide on December 31, 2020.
- Ohio: American Contract Systems, Inc (Facility ID: ACSOH) installed control for ethylene oxide 4/2021.
- Pennsylvania: Cosmed Group LLC/Erie (EIS Facility ID: 3765611) installed ethylene oxide controls 8/2022.
- South Carolina: STERIS-Isomedix Services (EIS Facility ID: 6640211) installed additional ethylene oxide controls in 2/2021.
- Texas:
 - Midwest Sterilization Corp (EIS Facility ID: 9061511) ethylene oxide emission controls installed after year 2018.
 - Ethicon Inc (EIS Facility ID: 6755311) ethylene oxide emission controls installed after year 2018.
 - Sterigenics U.S. LLC (EIS Facility ID: 9132811) ethylene oxide emission controls installed in 2022.
 - o Isomedix Operations, Inc. (EIS Facility ID: 6888911) ethylene oxide emission controls installed 6/2022.
 - Isomedix Operations, Inc. (EIS Facility ID: 3049411) ethylene oxide emission controls installed 9/2021 and 12/2021.
- Wisconsin: Evonik Corp (EIS Facility ID: 4953611) ethylene oxide emissions reduced since 2019 on a voluntary basis with refined emission calculations, removal of equipment,

installation of emission reducing components, and implementing an enhanced leak detection and repair program.

2. <u>Changes from 2018 NEI – incorporated into the results via post-modeling corrections, after modeling was done</u>

Minnesota: Beltrami and Rice counties, 2018NEI emissions from the nonpoint
Residential Wood Combustion (RWC) are overestimated. These correct 2018 emissions
are 0.41 times the values presented in AirToxScreen for Beltrami County and 0.25 times
the values for Rice County. Emissions and risks were corrected in 2018 AirToxScreen
with post-modeling adjustments using these ratios for these counties.

3. Corrections to 2018 emissions that are not reflected in the AirToxScreen results

These corrections were identified in our final stages of QA/QC of the AirToxScreen information, and therefore EPA could not include them in the AirToxScreen results. Please consider this list in your use of AirToxScreen to prioritize pollutants or sources for further study.

- Arizona: Stryker Sustainability Solutions (Facility ID: STRYKER) updated information from facility indicates ethylene oxide emissions were approximately 70% lower in 2018 than what appears in the 2018 AirToxScreen.
- North Carolina: Centurion Medical Products Corporation (EIS Facility ID: 14638611) updated information from facility indicates that ethylene oxide emissions are approximately 90% less than what appears in the 2018 AirToxScreen.
- Oregon: Boeing Company (EIS Facility ID: 8140811) updated information from the Oregon Department of Environmental Quality indicates that hexavalent chromium emissions are approximately 99.8 - 99.96% less than what appears in the 2018 AirToxScreen.

4. Minor corrections that did not impact resulting concentrations or risks

 Emissions at Facility ID ACSTEMPLETERRACE were modeled at the correct location in Hillborough County, Florida (FIPS 12057). However, the FIPS code and State were mistakenly assigned to Hillsborough County, New Hampshire (FIPS 33011) in the following two files: point_fac_2018_emissions.xlsx, point_src_2018_mapapp.xlsx. On September 7, 2022, the FIPS code and state for these emissions were corrected in these files on the AirToxScreen website. This correction was made to the file AirToxScreen_2018_Emissions_County_Sourcegroup.accdb when it was posted.