

Ethylene Oxide (EtO) Emissions at Sterigenics, Medline, and Vantage

The following data was obtained through a Freedom of Information Act (FOIA) request submitted to the Illinois Environmental Protection Agency (IEPA) on November 9, 2018

Sterigenics (Willowbrook, IL)						
Year	Permit Type	Allowable EtO Emissions Tons/Yr.*	Reported EtO Emissions Tons/Yr.	Emission Control Type	Efficiency	Violation Notices
2006	Expect it was a CAAPP, haven't confirmed	25.920149	2.38	Acid Water Scrubber	99%	-
2007	"	26.963184	3.67	"	99%	-
2008	"	26.963184	3.54	"	99%	-
2009	"	26.963184	2.8	"	99%	-
2010	"	26.963184	3.22	"	99%	-
2011	"	9.596544	3.49	"	99%	-
2012	"	9.596544	3.49	"	99%	-
2013	"	9.596544	2.98	"	99%	Yes ¹
2014	"	9.596544	2.54	"	99%	-
2015	CAAPP Renewed	10.63176	2.3	"	99%	-
2016	"	Not Provided	2.1	"	99%	-
2017	"	Not Provided	2.3	"	99.90%	-

*Allowable and reported EtO emission data are from the Annual Emissions Reports submitted by the facilities

Violation Notices:

¹A Violation Notice was issued to Sterigenics in 2013 for causing, threatening or allowing the discharge of EtO to the atmosphere from Chamber B, failure to take Chamber B off-line so excess emissions would cease, failure to reduce EtO emissions from Chamber B by at least 99% during the October 20, 2013 event and for failure to reduce uncontrolled VOM emissions from Chamber B of at least 81%.

²A Violation Notice was issued to Medline in 2012 for failure to timely apply for renewal of its CAAPP Permit #04120009.

³A Violation Notice was issued to Medline in 2014 for failure to submit an Annual Compliance Certification to the IEPA for calendar year 2013, a violation of the CAAPP Permit #04120009.

⁴A Violation Notice was issued to Vantage in 2015 for failure to record the position of cooling water supply valve, failure to timely submit quarterly report of leaking components, failure to timely submit semi-annual NESHAP for equipment leaks, failure to comply with requirements of NSPS for equipment leaks of VOCs, caused or allowed fugitive emissions of VOCs in excess of 4.69 tons/year.

⁵A Violation Notice was issued to Vantage in 2016 for failure to conduct testing within 240 days of the effective date of the CAAPP for a scrubber and condensers and for failure to employ emissions capture and control techniques which achieve an overall reduction in uncontrolled VOM emissions to at least 81%.

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Medline Industries (Waukegan, IL)						
Year	Permit Type	Allowable EtO Emissions Tons/Yr.*	Reported EtO Emissions Tons/Yr.	Emission Control Type	Efficiency Sterilization/ Aeration Process	Violation Notices
2006	In process of determining if the facility had a CAAPP at one time	5.37264	2.742	Wet Scrubbers/ Aeration Process	99%	-
2007		5.37264	2.49	"	99%	-
2008		5.37264	1.648962	"	Not Reported	-
2009		5.37264	1.892394	"	99.29%/99%	-
2010		5.37264	1.875006	"	99.29%/99%	-
2011		5.37264	1.718514	"	99.29%/99%	-
2012		5.37264	1.756188	"	99.29%/99%	Yes ²
2013	Current IEPA Operating Issued	5.37264	1.5345	"	99.29%/99%	-
2014		5.37264	1.763433	"	99.29%/99%	Yes ³
2015		5.37264	1.557675	"	99.29%/99%	-
2016		Not Provided	1.496817	"	99.29%/99%	-
2017		Not Provided	1.431612	"	99.29%/99%	-

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⁴A Violation Notice was issued to Vantage in 2015 for failure to record the position of cooling water supply valve, failure to timely submit quarterly report of leaking components, failure to timely submit semi-annual NESHAP for equipment leaks, failure to comply with requirements of NSPS for equipment leaks of VOCs, caused or allowed fugitive emissions of VOCs in excess of 4.69 tons/year.

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Vantage Specialty Chemicals (Gurnee, IL)						
Year	Permit Type	Allowable EtO Emissions Tons/Yr.*	Reported EtO Emissions Tons/Yr.	Emission Control Type	Efficiency	Violation Notices
2006	CAAPP	Not Provided	Not Reported	Various emission controls used for multiple processes	Not Reported	-
2007	"	"	"		"	-
2008	"	"	"		"	-
2009	"	"	"		"	-
2010	"	"	"		"	-
2011	"	"	"		"	-
2012	"	"	"		"	-
2013	"	"	"		"	-
2014	"	"	"		"	-
2015	"	"	"		"	Yes ⁴
2016	"	"	1.00		"	Yes ⁵
2017	"	"	1.08		"	-

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